ORDER NO. AD9301[illegible]3C0
A2

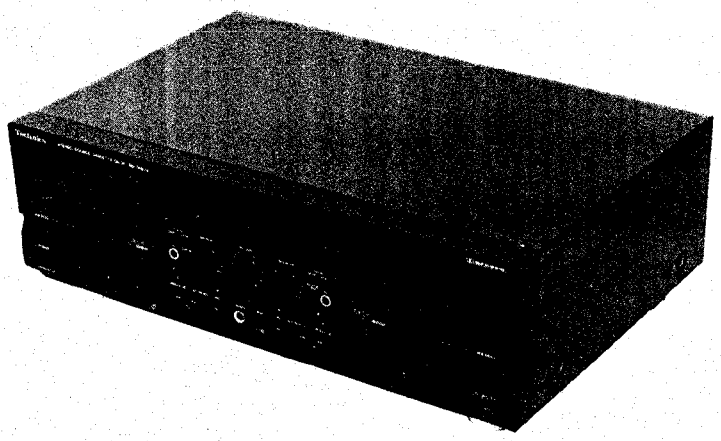
Service Manual

Cassette Deck

Dolby NR-Equipped Stereo Double Cassette Deck

RS-TR979

DOLBY B·C NR HX PRO*



Colour

(K) ... Black Type

Area

Suffix for Model No.	Area	Colour
(PP)	U.S.A./Canada.	(K)
(EB)	Great Britain.	
(EG)	Germany, Italy and Continental Europe.	
(GC)	Asia, Latin America, Middle Near East and Africa.	

* HX Pro headroom extension originated by Bang Olufsen and manufactured under license from Dolby Laboratories Licensing Corporation.
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NEW MECHANISM FOR RS-TR979 (AR-1)

SPECIFICATIONS

■ CASSETTE DECK SECTION

Deck system — Stereo cassette deck
Track system — 4-track, 2-channel
Recording system — AC bias
Bias frequency — 80kHz
Erasing system — AC erase
Heads
DECK 1 — Recording/Playback head (Permalloy) × 1
Erasing head (Double-gap ferrite) × 1
DECK 2 — Recording/Playback head (Permalloy) × 1
Erasing head (Double-gap ferrite) × 1
Motors
DECK 1 — Capstan/reel table drive (DC servo motor) × 1
Reel table drive (DC motor) × 1
DECK 2 — Capstan/reel table drive (DC servo motor) × 1
Reel table drive (DC motor) × 1
Tape speed — 4.8cm/sec. (1-7/8ips)
Wow and flutter
For (PP) area — 0.1% (WRMS)
For others — 0.07% (WRMS)
±0.2% (DIN)
Fast forward and rewind times
Approx. 45 seconds with C-60 cassette tape
Frequency response (Dolby NR off)
NORMAL — 40Hz–15kHz±3dB
For (PP) area — 20Hz–17kHz
For others — 20Hz–16kHz (DIN)
CrO_2 — 40Hz–15kHz±3dB
For (PP) area — 20Hz–17kHz
For others — 20Hz–16kHz (DIN)
METAL — 40Hz–16kHz±3dB
For (PP) area — 20Hz–18kHz
For others — 20Hz–17kHz (DIN)
S/N (Signal level=max recording level, CrO_2 type tape)
NR off — 56dB (A weighted)
Dolby B NR on — 66dB (A weighted)
Dolby C NR on — 74dB (A weighted)
Input sensitivity and impedance
REC (IN) — 100mV/47kΩ
Output voltage and impedance
PLAY (OUT) — 500mV/500Ω
HEADPHONES — 37.5mV/(8Ω)
(Load impedance 8Ω~600Ω)

■ GENERAL

Power consumption — 28W
Power supply
For (PP) area — AC 60Hz, 120V
For (GC) area — AC 50/60Hz, 110V/127V/220V/240V
For others — AC 50/60Hz, 230V~240V
Dimensions (W × H × D)
430 × 145 × 280mm (16-15/16" × 5-23/32" × 11-1/32")
Weight — 5.3kg (11.7lb.)

Note:
Specifications are subject to change without notice.
Weight and dimensions are approximate.

Technics

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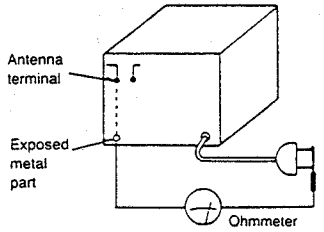
■ SAFETY PRECAUTION (This "safety precaution" is applied only in U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

• INSULATION RESISTANCE TEST

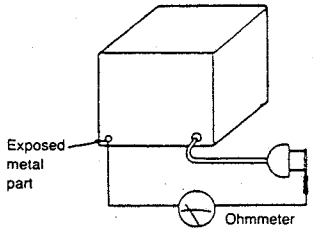
1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads antenna, control shafts, handle brackets, etc. Equipment with antenna terminals should read between 3MΩ and 5.2MΩ to all exposed parts (Fig. A). Equipment without antenna terminals should read approximately infinity to all exposed parts (Fig. B).

Note: Some exposed parts may be isolated from the chassis by design. These will read infinity.



(Fig. A)

Resistance=3 MΩ–5.2 MΩ



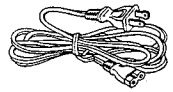
(Fig. B)

Resistance=Approx. ∞

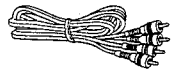
4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

RS-TR979

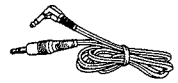
■ ACCESSORIES



AC power supply cord
(RJA0019-2K) ... (EG, GC)
(SJA172)..... (PP)
(VJA0733)..... (EB)
... 1pc.



Stereo connection cables
(SJP2249-3)..... 2pcs.



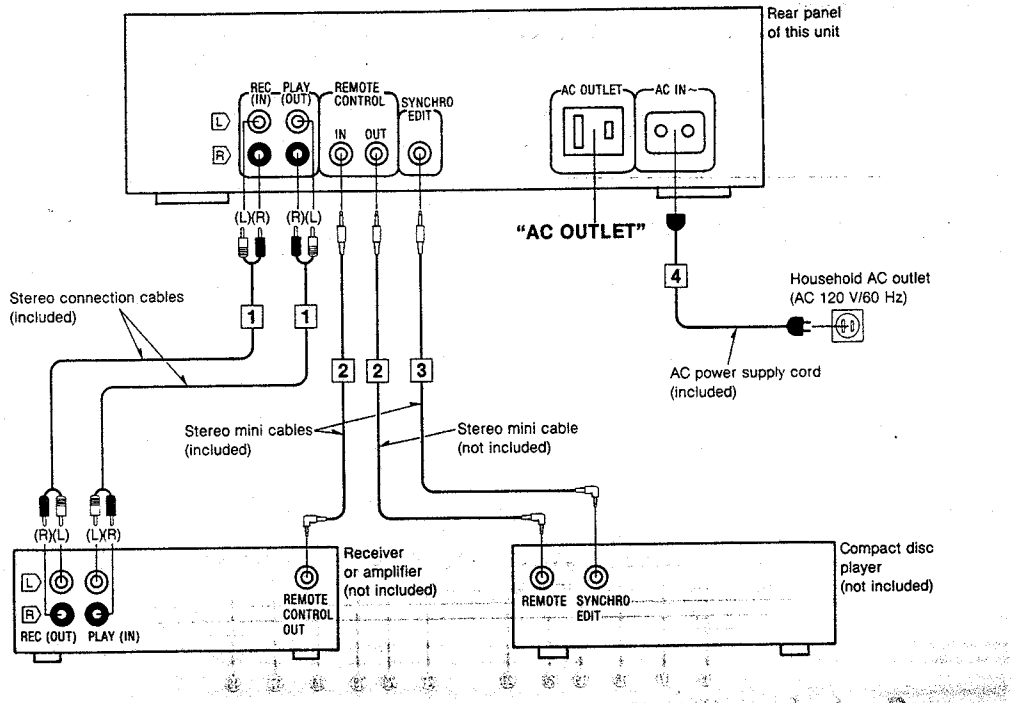
Stereo mini cables
(SJP2257T)..... 2pcs.

Power plug adaptor
(SJP5213-2)..... 1pc.
(For GC area only)

■ CONNECTIONS

Before making connections, be sure that the power to this unit and all other system components is turned off first.
See the operating instructions of the receiver (or amplifier) and the compact disc player for details.

Make connections in the numberd sequence by using the cables.
Note:
Avoid letting the cables touch each other as much as possible, otherwise noise will be generated.



The following functions can be operated by remote control (When connected to the appropriate Technics receiver): *Playback, Stop, Pause, Rewind/fast-forward search, Record,* and 1–2 (A–B) deck selection.

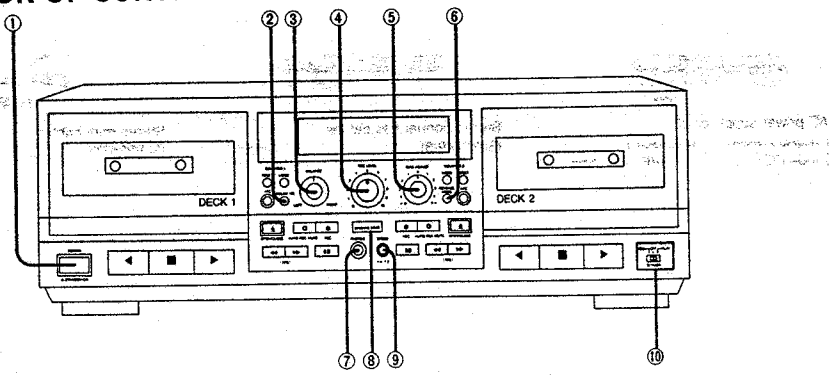
The REMOTE CONTROL "OUT" terminal is provided to connect a Technics Compact Disc Player or Graphic Equalizer.

The REMOTE CONTROL and SYNCHRO EDIT terminals can only be used with selected Technics Components. Please contact your dealer for details.

"AC OUTLET" (UNSWITCHED: PP area only)

Power is always available, regardless of the unit's power switch setting.
Audio equipment rated up to 100 W can be connected.

■ LOCATION OF CONTROL



Control section

Controls common to both tape decks

① **Power " ⏻ STANDBY/ON" switch (POWER, ⏻ STANDBY/ON)**

② **Dolby noise-reduction button (DOLBY NR)**
This button is used to reduce the hissing noise heard from the tape. This unit is provided with both the B-type and C-type noise-reduction systems.

③ **Recording-balance control (BALANCE)**
This control is used to balance the left and right sound levels during recording.

④ **Recording-level control (REC LEVEL)**
This control is used to regulate the recording level.

⑤ **Bias-adjustment control (BIAS ADJUST)**
This control is used to equalize the frequency response during recording.

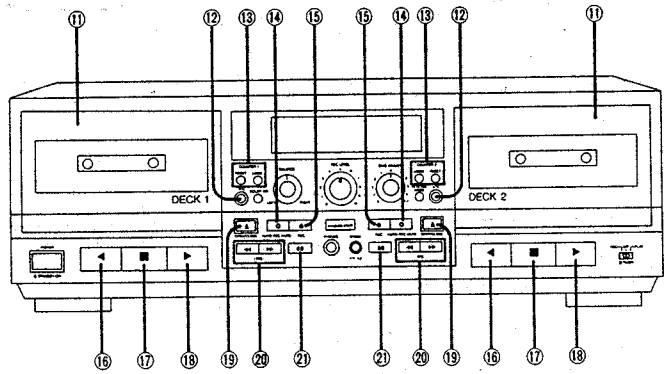
⑥ **Reverse-mode selector (REVERSE MODE)**
This selector is used for selection of the reverse mode (for either playback or recording).

⑦ **Headphones jack (PHONES)**

⑧ **Synchro-start button (SYNCHRO START)**
This button is used to start a tape-to-tape recording, simultaneously starting deck 1 (the playback deck) and deck 2 (the recording deck).

⑨ **Tape-to-tape recording-speed button (SPEED)**
This button is used to select the recording speed during tape-to-tape recording.

⑩ **Timer switch (TIMER)**
This switch is used to automatically begin a tape recording or tape playback at a certain time, selected by an optional timer.



Control section (continued)

Controls applicable to tape deck 1 and/or 2

⑪ **Cassette holder**

⑫ **ATC button (ATC)**
This button is used to perform ATC (auto tape calibration).
(See page 6.)

⑬ **Tape counter buttons (COUNTER 1/COUNTER 2)**
MODE: This button is used to select the tape/linear counter indication.
RESET: This button is used to reset the tape counter indication to "000__"/"00.00".

⑭ **Automatic-record-muting button (O AUTO REC MUTE)**
This button is used to make a silent interval on the tape while recording is in progress.

⑮ **Record button (● REC)**
This button is used to set deck to the recording stand-by mode.

⑯ **Reverse-side playback button (◀)**
This button is used to start the playback or recording of side "B" of the cassette.
(The tape will move in the right-to-left direction.)

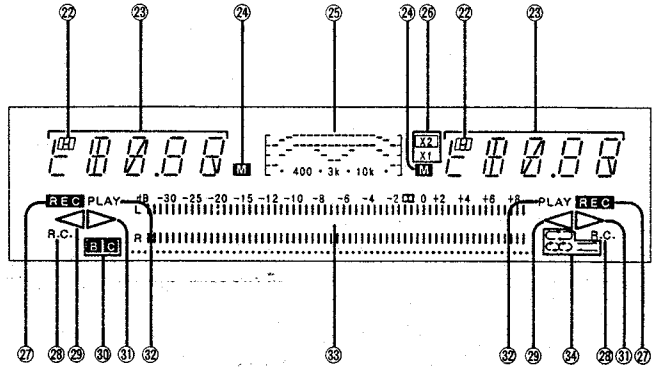
⑰ **Stop button (■)**
This button is used to stop the tape movement.

⑱ **Forward-side playback button (▶)**
This button is used to start the playback or recording of side "A" of the cassette.
(The tape will move in the left-to-right direction.)

⑲ **Open/close button (▲ OPEN/CLOSE)**
This button is used to open or close the cassette holder.

⑳ **Rewind/fast-forward search buttons (◀◀/▶▶ TPS)**
These buttons are used to advance or rewind the tape, or to easily and quickly search for the program's beginning of the tape.

㉑ **Pause button (❚❚)**
This button is used to temporarily stop the tape playback or recording.



Display section

㉒ **High-speed rewind/fast-forward search indicator (H)**
Illuminates during high-speed rewind/fast-forward or high-speed search.

㉓ **Tape counter/ATC display**
Normally functions as the tape/linear counter display. During ATC (auto tape calibration), displays the status of the ATC operation.

㉔ **ATC memory indicator (M)**
Flashes during ATC (auto tape calibration), and then remains illuminated when the ATC operation is completed.

㉕ **ATC graphic display**
Shows a graphic display of the ATC (auto tape calibration) operation.

㉖ **Tape-to-tape recording-speed indicators (×1, ×2)**
One of these indicators illuminates to show which of the tape-to-tape recording speeds was selected by pressing the tape-to-tape recording-speed button.

㉗ **Recording indicator (REC)**
Illuminates to indicate that this unit is in the recording stand-by mode or is recording.

㉘ **Remote-control indicator (R.C.)**
Illuminates to indicate that this unit can now be controlled by the remote control transmitter of the appropriate receiver connected.

㉙ **Reverse-side indicator (◁)**
Illuminates during playback or recording to indicate that side "B" of the tape is being used.

㉚ **Dolby noise-reduction indicators (B , C)**
Each indicator illuminates to show the type of Dolby noise-reduction system selected by pressing the Dolby noise-reduction button.

㉛ **Forward-side indicator (▷)**
Illuminates during playback or recording to indicate that side "A" of the tape is being used.

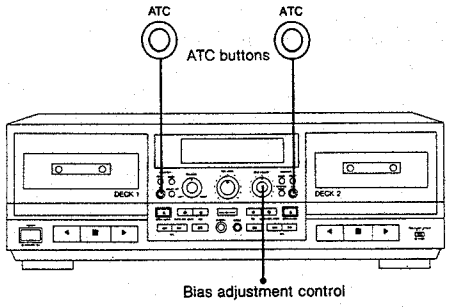
㉜ **Playback indicator (PLAY)**
When this indicator illuminates steadily, it indicates that this unit is in the playback or recording mode.
When flashing, indicates that this unit is in the pause mode or in the recording stand-by mode.

㉝ **Input level meter**
During playback, this meter indicates the level of the recorded sound.
During recording, it indicates the level being recorded, adjusted by the recording-level control.

㉞ **Reverse-mode indicators (⇉ , ⊂⊃ , ⊂∞)**
Each indicator illuminates to show which of the reverse modes was selected by the reverse-mode selector.

■ ABOUT THE ATC FUNCTION

ATC (auto tape calibration) is the function which identifies the quality of the tape (concerning bias, level, equalizer) automatically and sets the most desirable recording condition. It takes about 1 minute to complete the setting.



ATC will begin when the ATC button on the deck in which the cassette for recording is inserted is pressed.

Perform ATC while the other deck is in the stop (or rewind/fast-forward) mode.

Because the ATC function records a test signal onto the tape, any previously recorded material will be erased, so be careful not to accidently erase material which you wish to save.

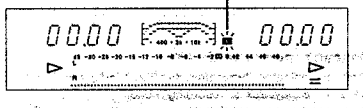
Although ATC can also be performed for a tape which is partly wound, it is not possible at the end of the tape. Although the tape will be wound back to its original position after ATC has been completed, the position may be slightly different from the exact original position. Therefore, perform ATC 2 seconds or more after the end of the previous track.

Be sure to set the bias adjustment control to 0.

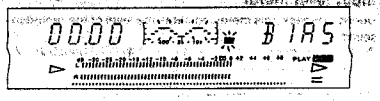
The display changes as follows while the ATC setting is taking place.

Example: Performing ATC on tape deck 2.

① Press the ATC button.

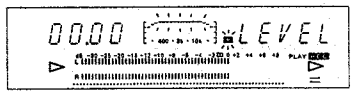


② Bias setting in progress.

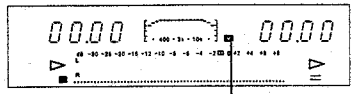


③ Equalizer setting in progress.

④ Level setting in progress.



⑤ ATC completed.



If the leader tape (attached to each end of recording tape) is reached during the above setting operations, the " M " indicator will rapidly flash on and off to indicate that ATC is not possible. Wind the tape to a position from which ATC can be performed and press the ATC button once again.

To cancel the ATC function while the settings are in progress:

Press the stop button.

To cancel the ATC settings after they have been made:

Press the ATC button. (The settings cannot be cancelled during recording.)

Notes:

ATC may not be possible on an old tape or on some special types of tapes.

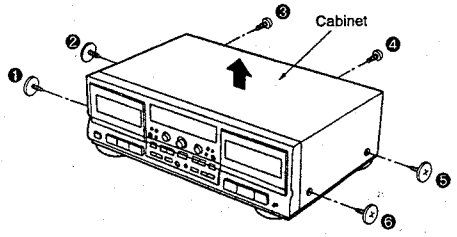
The settings will be cancelled if the open/close button is pressed, so do not remove the tape cassette until recording has been completed.

Unless the ATC settings are cancelled, they will be stored in memory even after the power has been switched to the standby condition (or the AC power supply cord has been disconnected from the AC outlet).

■ DISASSEMBLY INSTRUCTIONS

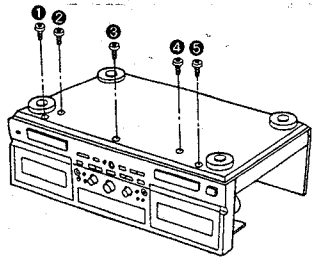
"ATTENTION SERVICER"
Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref.No. 1	Removal of the cabinet
Procedure 1	

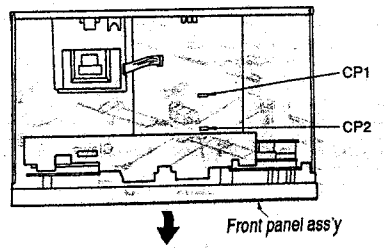


• Remove the 6 screws(❶~❻).

Ref.No. 3	Removal of the front panel ass'y
Procedure 1→3	

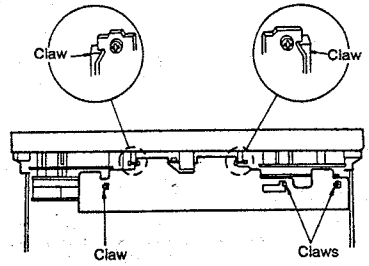


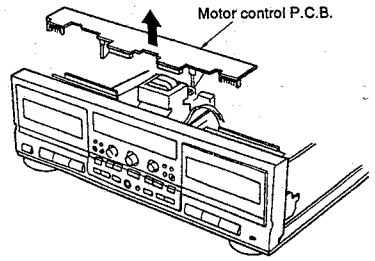
1. Remove the 5 screws(❶~❺).



2. Remove the 2 connectors(CP1, CP2).
3. Remove the front panel ass'y in the direction of arrow.

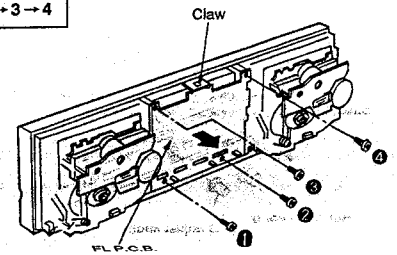
Ref.No. 2	Removal of the motor control P.C.B.
Procedure 1→2	





• Release the 5 claws and then remove the motor control P.C.B. in the direction of arrow.

Ref.No. 4	Removal of the FL P.C.B.
Procedure 1→2→3→4	



1. Remove the 4 screws(❶~❹).
2. Release the 1 claw and then remove the FL P.C.B. in the direction of arrow.

■ ADJUSTMENT PROCEDURE

This unit holds recording bias and equalization data in its EEPROM chip. An internal CPU automatically adjusts playback gain, recording bias, overall gain, and overall frequency response according to the ROM data. Manual adjustment with potentiometers is no longer necessary except for head azimuth and tape speed. All other items require only measurement data checks.
The adjustment and checkout procedures are as follows.

• Writing to EEPROM

The EEPROM chip holds the optimal recording bias and equalization data. If the chip has been replaced, be sure to write to it, following the steps below:

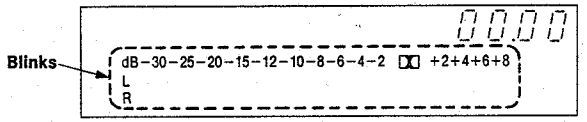
Short the Test Mode terminals with a shorting clip.

↓

While holding down the STOP button on DECK2, press the POWER switch to ON.

↓

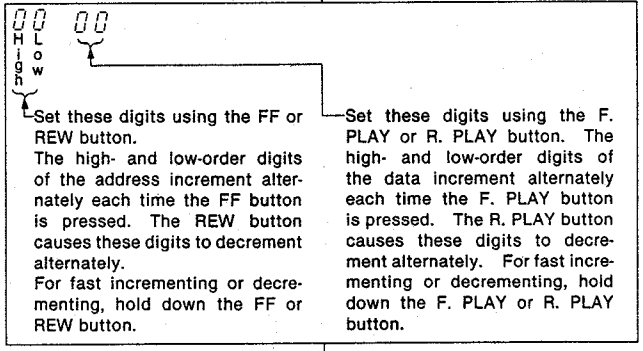
All FL display segments except for the four-digit counter on DECK2 will start blinking to indicate that the deck has entered Write mode.
At this point the four-digit counter will indicate "00**".



↓

The counter shows a four-digit hex number. The two high-order digits indicate a ROM address, and the two low-order digits indicate the data stored at that address.

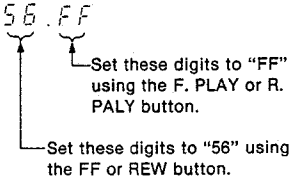
↓


00 00
High
Low
Set these digits using the FF or REW button.
The high- and low-order digits of the address increment alternately each time the FF button is pressed. The REW button causes these digits to decrement alternately.
For fast incrementing or decrementing, hold down the FF or REW button.
Set these digits using the F. PLAY or R. PLAY button. The high- and low-order digits of the data increment alternately each time the F. PLAY button is pressed. The R. PLAY button causes these digits to decrement alternately. For fast incrementing or decrementing, hold down the F. PLAY or R. PLAY button.

↓

Ⓐ

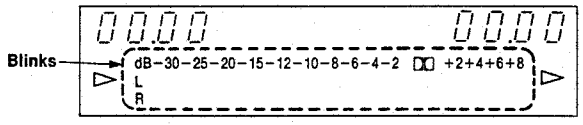
Example: Set "FF" in address 56 (see **Fig. 1**).



Ⓐ

Set data (see **Fig. 1**) to addresses 22 through 7E. After this, set "00" (end) in address 7E and exit from Write mode.

After completing ROM writing, press the STOP button on DECK2 to restore the normal Test mode. The four-digit counter on DECK1 displays.



Remove the shorting clip from the Test Mode terminals. The FL display will stop blinking.

Low \ High	0	1	2	3	4	5	6	7
0	—	—	—	—	B0	68	30	88
1	—	—	—	—	00	78	68	68
2	—	—	D0	68	—	38	B0	FF
3	—	—	80	78	—	64	6C	B0
4	—	—	E0	38	—	A8	FF	C4
5	—	—	7C	64	—	50	A0	1C
6	—	—	FB	A8	80	FF	BA	68
7	—	—	F5	00	58	74	2C	78
8	—	—	0F	—	18	B8	—	50
9	—	—	2B	—	80	30	—	72
A	—	—	12	—	88	—	—	4A
B	—	—	07	—	96	—	—	55
C	—	—	—	84	—	—	80	—
D	—	—	—	60	—	—	58	—
E	—	—	—	30	—	84	18	00
F	—	—	—	68	—	60	80	—

Fig. 1

■ MEASUREMENTS AND ADJUSTMENTS

Measurement Condition

- Rec. level control; Maximum
- Timer switch; Off
- Recording-balance control; Center
- Bias-adjustment control; Center
- Reverse-mode selector switch; ⇄
- Tape-to-tape recording-speed switch; Off
- Dolby NR switch; Off
- ATC switch; Off
- Make sure heads are clean
- Make sure capstan and pressure roller are clean
- Judgeable room temperature 20±5°C (68±9°F)

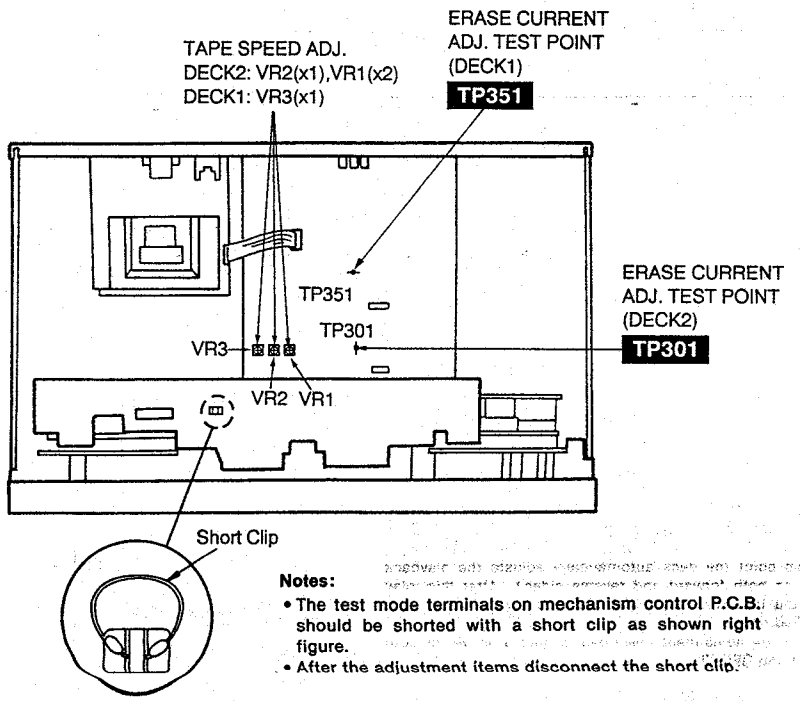
Measuring instrument

- EVM (Electronic Voltmeter)
- Oscilloscope
- Digital frequency counter
- AF oscillator
- ATT (Attenuator)
- DC voltmeter
- Resistor (600Ω)

Test tape

- Head azimuth adjustment (8kHz, −20dB); QZZCFM
- Tape speed adjustment (3kHz, −10dB); QZZCWAT
- Playback frequency response (315Hz, 12.5kHz, 10kHz, 8kHz, 4kHz, 1kHz, 250Hz, 125Hz, 63Hz, −20dB); QZZCFM
- Playback gain adjustment (315Hz, 0dB); QZZCFM
- Overall gain adjustment and Overall frequency response
  Normal reference blank tape; QZZCRA
  CrO_2 reference blank tape; QZZCRX
  Metal reference blank tape; QZZCRZ

• Adjustment Points



Notes:

- The test mode terminals on mechanism control P.C.B. should be shorted with a short clip as shown right figure.
- After the adjustment items disconnect the short clip.

HEAD AZIMUTH ADJUSTMENT (DECK 1/2)

1. Playback the azimuth adjustment portion (8kHz, −20dB) of the test tape (QZZCFM). Vary the azimuth adjusting screw until the output of the R-CH are maximized.
2. Perform the same adjustment in the play mode.
3. Repeat the same check in reverse play mode.
4. After the adjustment, apply screwlock to the azimuth adjusting screw.

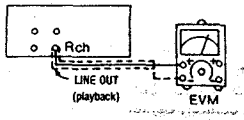


Fig. 1

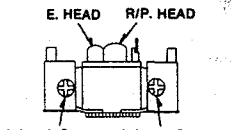


Fig. 2

TAPE SPEED ADJUSTMENT (DECK 1/2)

Normal speed

1. Playback the middle portion of the test tape (QZZCWAT).
2. Adjust Deck 1=**VR3** and Deck 2=**VR2** so that the output is within the standard value.

Standard value: 3000±15Hz (NORMAL speed)

High speed [Set the unit to forward (FWD) mode.]

3. Press the tape-to-tape recording-speed selector switch (X2) button.
   This will set the high speed mode.
4. Playback the middle portion on the test tape (QZZCWAT).
5. At that time, check if the output from DECK 1 is within the standard value.

Standard value: 6000±600Hz (HIGH speed)

6. Adjust **VR1** so that the output frequency of DECK 2 is within ±30Hz for the value of the output frequency of DECK 1.

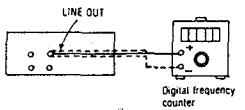


Fig. 3

PLAYBACK GAIN ADJUSTMENT (DECK 1/2)

1. Set the AF oscillator's output frequency to 315Hz.
2. With no tape loaded in the deck, press and hold the REC button on DECK2 (or DECK1). Adjust the test signal level using the Rec. Level and Balance controls until the line output levels on both channels are 320mV. When the adjustment is complete, release the REC button. (The deck stores the data at the moment the REC button is released.)
3. Load the test tape (QZZCFM) into the deck and locate the part where the playback gain test tone (315Hz, 0dB) is recorded. Press the ATC button, then the FWD PLAY button. (At this point the deck automatically adjusts the playback gains on both forward and reverse sides.) After this, play back the tape and verify that the output level falls in the specified range.
4. Perform the adjustment described in step 3 above for both DECK1 and DECK2.

Standard value: 320mV±0.5dB

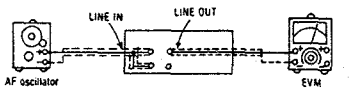


Fig. 4

PLAYBACK FREQUENCY RESPONSE (DECK 1/2)

1. Playback the frequency response portion (315Hz, 12.5kHz~63Hz, −20dB) of the test tape (QZZCFM).
2. Assure that the frequency response is within the range shown in **Fig. 6** for both L-CH and R-CH.

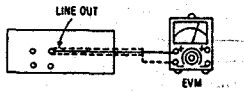


Fig. 5

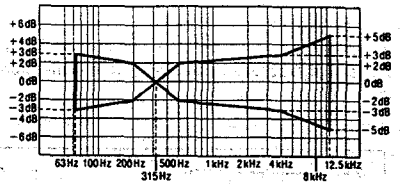


Fig. 6

ERASE CURRENT ADJUSTMENT (DECK 1/2)

1. Insert the Metal blank test tape (QZZCRZ) and set the unit to the Record Pause mode.
2. Check if the output at this time between the erase current confirmation point Deck 1=**TP351** (Deck 2=**TP301**) and GND (chassis) (the output on both edges of Deck 1=R358 (DECK 2=R308)) is within the standard value.

Standard value: 180±20mA (Metal)...EVM Reading: 180±20mV

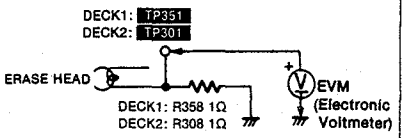


Fig. 7

OVERALL GAIN ADJUSTMENT AND OVERALL FREQUENCY RESPONSE (DECK 1/2)

1. Load a Normal blank test tape (QZZCRA) into the deck under test. Press the ATC button, then the REC button. (At this point the deck automatically adjusts the overall gain and frequency response.)
2. With the deck placed in Record. Pause mode, apply the reference test signal (1kHz) to the Rec. input and adjust the output level to 320mV with the attenuator (ATT). After this, start recording.
3. While playing back the reference signal just recorded, verify that the output level falls in the following range.

Standard value: 320mV±0.5dB

4. Apply test signals (with the specified test frequencies covering the range from 50Hz to 10kHz) whose levels are 20dB lower than the reference signal level (1kHz) to the Rec. input and record these signals in sequence.
5. Play back the test signals just recorded and verify that the levels at the test frequencies fall in the ranges specified in **Fig. 8** with respect to the reference signal level.
6. Repeat steps 4 and 5 above for CrO_2 blank test tape (QZZCRX) and Metal blank test tape (QZZCRZ), in these cases raising the upper end of the test signal frequency range to 12.5kHz. Verify that the signal levels at the test frequencies fall in the ranges specified in **Fig. 9** with respect to the reference signal level.
7. Perform the same checks for both DECK1 and DECK2. Steps 1 through 4 above are concerned with overall gain; steps 5 through 7 pertain to overall frequency response.

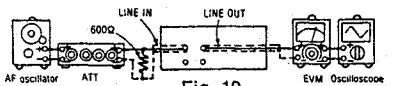


Fig. 10

Normal Overall frequency response chart (NR OUT)

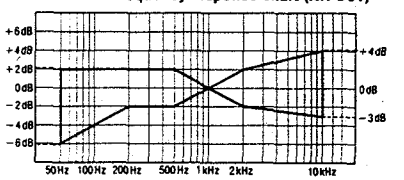


Fig. 8

CrO_2 Metal Overall frequency response chart (NR OUT)

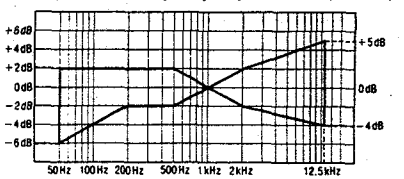
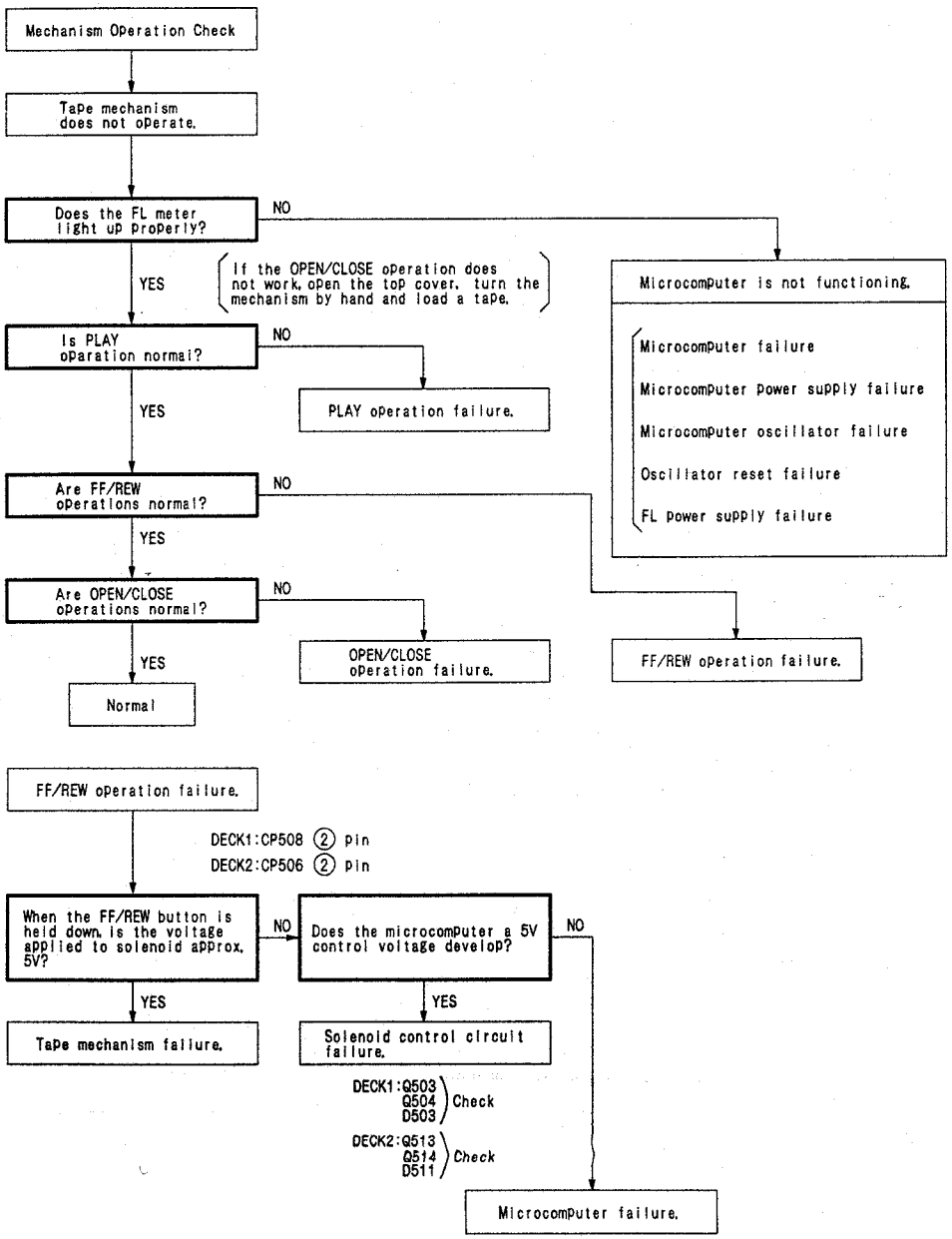
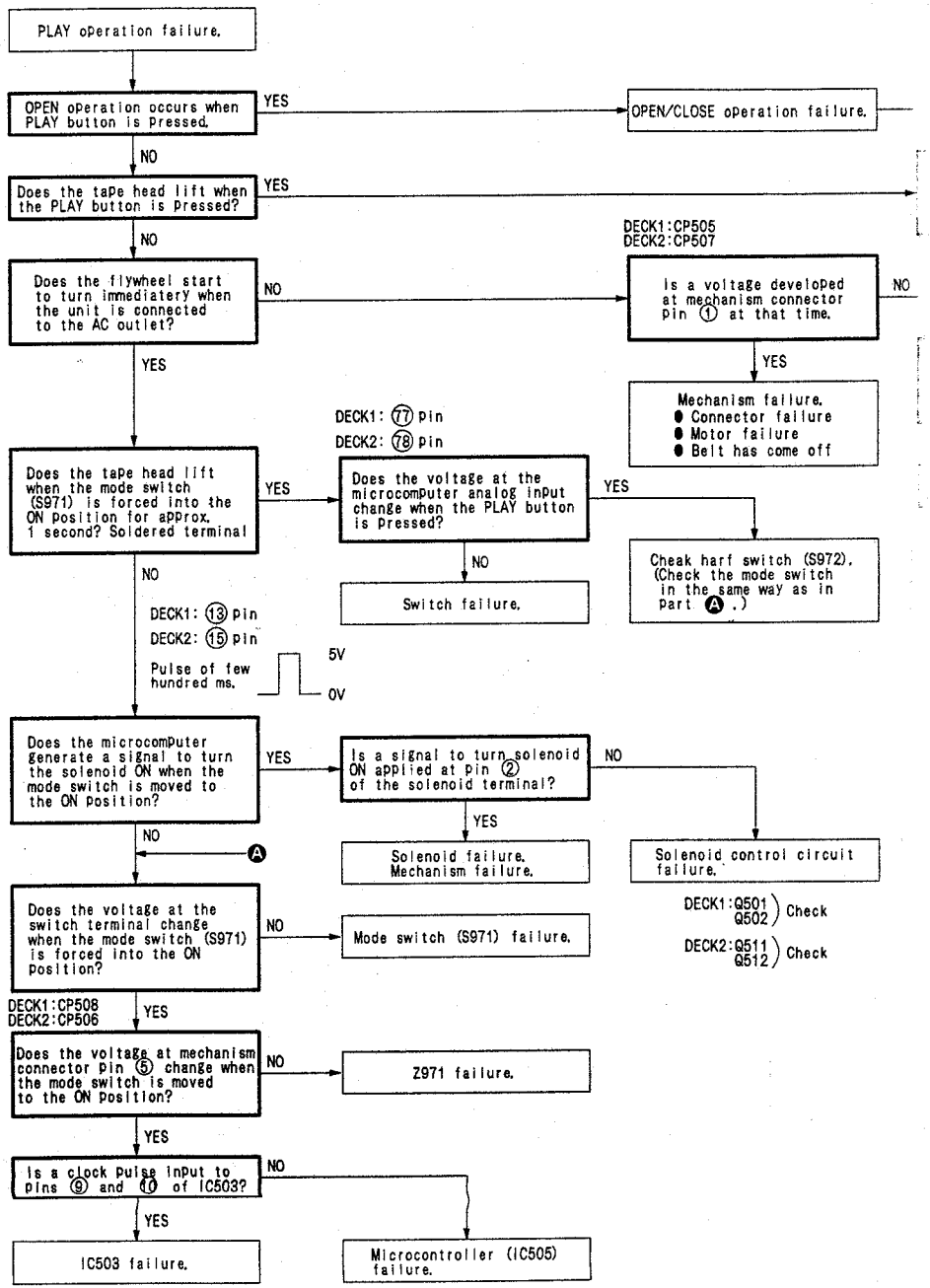


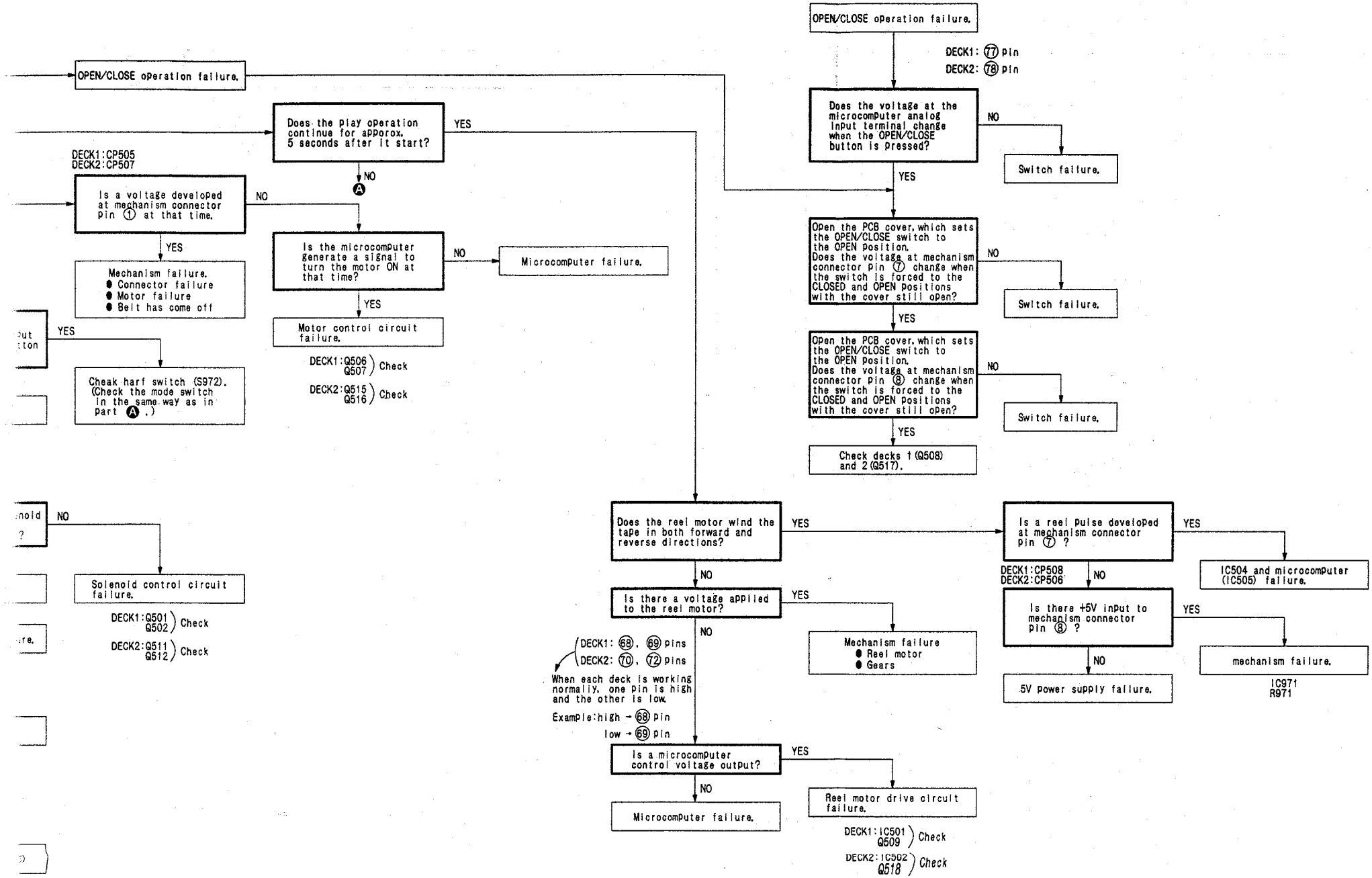
Fig. 9

■ TROUBLESHOOTING GUIDE

*To perform troubleshooting, set the unit to the state described in the "Motor Control PCB Checking Method" on page 11.




PLAY operation failure.
OPEN operation occurs when PLAY button is Pressed.
YES
OPEN/CLOSE operation failure.
NO
Does the tape head lift when the PLAY button is Pressed?
YES
NO
Does the flywheel start to turn immediatery when the unit is connected to the AC outlet?
NO
DECK1:CP505
DECK2:CP507
Is a voltage developed at mechanism connector pin (1) at that time.
NO
YES
Mechanism failure.
● Connector failure
● Motor failure
● Belt has come off
YES
DECK1: (77) pin
DECK2: (78) pin
Does the tape head lift when the mode switch (S971) is forced into the ON position for approx. 1 second? Soldered terminal
YES
Does the voltage at the microcomputer analog input change when the PLAY button is Pressed?
YES
NO
Switch failure.
Cheak harf switch (S972). (Check the mode switch in the same way as in part (A).)
NO
DECK1: (13) pin
DECK2: (15) pin
Pulse of few hundred ms.
5V
0V
Does the microcomputer generate a signal to turn the solenoid ON when the mode switch is moved to the ON position?
YES
Is a signal to turn solenoid ON applied at pin (2) of the solenoid terminal?
NO
YES
Solenoid failure. Mechanism failure.
Solenoid control circuit failure.
DECK1:Q501 Q502 Check
DECK2:Q511 Q512 Check
NO
(A)
Does the voltage at the switch terminal change when the mode switch (S971) is forced into the ON position?
NO
Mode switch (S971) failure.
DECK1:CP508
DECK2:CP506
YES
Does the voltage at mechanism connector pin (5) change when the mode switch is moved to the ON position?
NO
Z971 failure.
YES
Is a clock pulse input to pins (9) and (10) of IC503?
NO
YES
IC503 failure.
Microcontroller (IC505) failure.


OPEN/CLOSE operation failure.
DECK1: (77) pin
DECK2: (78) pin
Does the voltage at the microcomputer analog input terminal change when the OPEN/CLOSE button is pressed?
NO
Switch failure.
YES
Open the PCB cover, which sets the OPEN/CLOSE switch to the OPEN position. Does the voltage at mechanism connector pin (7) change when the switch is forced to the CLOSED and OPEN positions with the cover still open?
NO
Switch failure.
YES
Open the PCB cover, which sets the OPEN/CLOSE switch to the OPEN position. Does the voltage at mechanism connector pin (8) change when the switch is forced to the CLOSED and OPEN positions with the cover still open?
NO
Switch failure.
YES
Check decks 1 (Q508) and 2 (Q517).
OPEN/CLOSE operation failure.
Does the play operation continue for approx. 5 seconds after it start?
YES
NO
A
DECK1:CP505
DECK2:CP507
Is a voltage developed at mechanism connector pin (1) at that time.
NO
YES
Mechanism failure.
● Connector failure
● Motor failure
● Belt has come off
Is the microcomputer generate a signal to turn the motor ON at that time?
NO
Microcomputer failure.
YES
Motor control circuit failure.
DECK1: Q506, Q507 Check
DECK2: Q515, Q516 Check
YES
Cheak harf switch (S972). (Check the mode switch in the same way as in part A.)
NO
Solenoid control circuit failure.
DECK1: Q501, Q502 Check
DECK2: Q511, Q512 Check
Does the reel motor wind the tape in both forward and reverse directions?
YES
NO
Is there a voltage applied to the reel motor?
YES
Mechanism failure
● Reel motor
● Gears
NO
DECK1: (68), (69) pins
DECK2: (70), (72) pins
When each deck is working normally, one pin is high and the other is low.
Example: high → (68) pin
low → (69) pin
Is a microcomputer control voltage output?
YES
Reel motor drive circuit failure.
DECK1: IC501, Q509 Check
DECK2: IC502, Q518 Check
NO
Microcomputer failure.
Is a reel pulse developed at mechanism connector pin (7) ?
YES
IC504 and microcomputer (IC505) failure.
DECK1:CP508
DECK2:CP506
NO
Is there +5V input to mechanism connector pin (8) ?
YES
mechanism failure.
IC971
R971
NO
5V power supply failure.

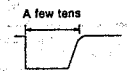
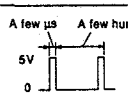
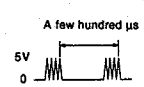
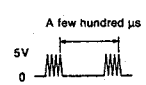
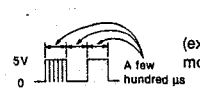
■ TERMINAL FUNCTION OF IC

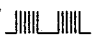
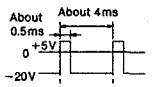
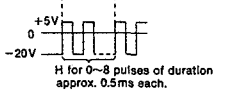
• IC505 (M38172M4065F): MICROCOMPUTER

＊To check the contents of the item "※" in the IC terminal table, set the unit to the state described in the "Motor Control PCB Checking Method" on page 11.

Pin No.	Mark	I/O Division	Function	Check point	※ Discription
1	RCH	I	Rch indication level input	Connector CP3 ② pin	0V with no signal and 1V with 0VU (−20dB) input in the REC or PAUSE mode. The voltage varies from 0 to 5V for different input levels.
2	BIAS	I	Bias adj. V.R input	Connector CP701 ③ pin	Bias ADJ. Vol. min ..... 0V center ..... 2.5V max 5V
3	MECHA1	I	Deck 1 leader tape det., mechanism switch	Connector CP502 ③ pin	(ex) 5V / 4.2V / 0.6V, 8ms — The waveform should vary with the type of tape and the tape speed of deck 1.
4	MECHA2	I	Deck 2 leader tape det., mechanism switch	Connector CP502 ④ pin	(ex) 5V / 4.2V / 0.6V, 8ms — The waveform should vary with the type of tape and the tape speed of deck 2.
5	SELA	O	Mecha. input selector signal output 1 (B) ON: "L", OFF: "H"	Connector CP502 ⑥ pin	8ms, 5V, 0
6	SELB	O	Mecha. input selector signal output 2 (A) ON: "L", OFF: "H"	Connector CP502 ⑤ pin	2ms, 5V, 0
7	RPT1	I	Deck 1 reel pulse det. input (take up side)	Connector CP502 ⑦ pin	5V, 0 — Changes within the 0 ↔ 5V range each time the take up reel on deck 1 is through approximately 30 degrees.
8	RPS1	I	Deck 1 reel pulse det. input (supply side)	Connector CP502 ⑧ pin	5V, 0 — Supply reel on deck 1
9	RPT2	I	Deck 2 reel pulse det. input (take up side)	Connector CP502 ⑨ pin	5V, 0 — Take up reel on deck 2
10	RPS2	I	Deck 2 reel pulse det. input (supply side)	Connector CP504 ① pin	5V, 0 — Supply reel on deck 2
11	HSPD1	I	Deck 1 high speed take up selector output	Connector CP504 ② pin	"H" (=5V) when deck 1 is in the high-speed FF/REW or TPS mode and "L" (=0V) in other modes.
12	HSPD2	I	*Deck 2 high speed take up selector output*	*Connector CP504 ③ pin*	"H" (=5V) when deck 2 is in the high-speed FF/REW or TPS mode and "L" (=0V) in other modes.

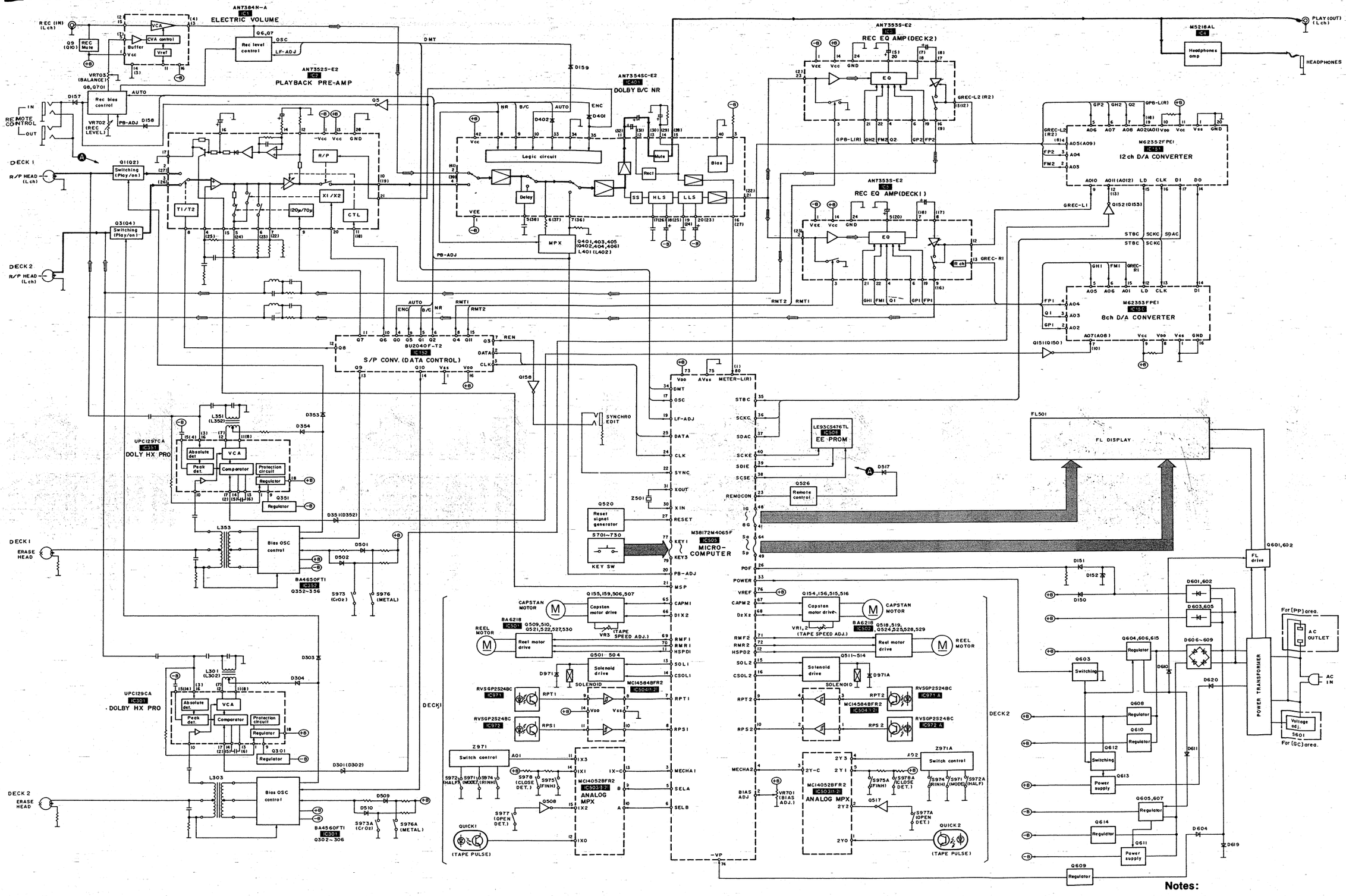
Pin No.	Mark	I/O Division	Function	Check point	※ Discription
13	SOL1	O	Deck 1 plunger trigger control output ON: "H", OFF: "L"	Connector CP504 ④ pin	"H" (=5V) for a period of a few tens to a few hundreds of milliseconds when deck 1 changes from stop mode to play mode and vice versa. When deck 1 changes from stop mode to FF/REW mode, this terminal generals "H" pulses twice for a period of a few tens to a few hundreds of milliseconds.
14	CSOL1	O	Deck 1 plunger keep control output ON: "H", OFF: "L"	Connector CP504 ⑤ pin	"H" (=5V) when deck 1 is in FF/REW mode.
15	SOL2	O	Deck 2 plunger trigger control output ON: "H", OFF: "L"	Connector CP504 ⑥ pin	Same as 13 above for deck 2.
16	CSOL2	O	Deck 2 plunger keep control output ON: "H", OFF: "L"	Connector CP504 ⑦ pin	Same as 14 above for deck 2.
17	OSC	O	Audio signal for adjustment output ON: "H", OFF: "L"	Connector CP3 ⑥ pin	Generates signals at approx. 400Hz, 10kHz and 3kHz (square wave (H and L, 0 and 5V) in REC mode during adjustment of ATC).
18	MODEL	I	Model selector input ON: "L", OFF: "H"	Connector CP5 ② pin	0V (GND)
19	LFADJ	O	Low frequency rec. adj. output ON: "H", OFF: "L"	Connector CP3 ⑦ pin	Normally "L" (=0V) H and L are switched every 0.4s in the REC mode during adjustment of ATC. Becomes "H" (=5V) in level mode.
20	PBADJ	O	Playback adj. output ON: "H", OFF: "L"	Connector CP3 ⑧ pin	Used for adjustment at factory but in the finished product. Remains at "L" (=0V).
21	MSP	I	TPS signal det. input ON: "L", OFF: "H"	Connector CP3 ⑨ pin	TPS mode No program: "H" (=5V) Programs: "L" (=0V)
22	SYNC	I	CD syncro start signal input ON: "L", OFF: "H"	Connector CP6 ⑨ pin	"L" (=0V) via cable from CD at the start of CD sync; "H" in other modes.
23	REMOCON	I	Remocon signal input ON: "H", OFF: "L"	TRANSISTOR Q526 collector	H and L pulse waveform appears on the input of a remote control signal.
24	CLK	O	Serial clock for serial data output ON: "H", OFF: "L"	Connector CP3 ⑩ pin	A few μs, A few ms, 5V, 0 — Constant pulse output
25	DATA	O	Serial data for amp control output ON: "H", OFF: "L"	Connector CP4 ① pin	5V, 0 — Data output in response to CLK above
26	POF	I	Power off det. input ON: "H", OFF: "L"	Connector CP4 ② pin	5V, 0 — Rectified waveform at both 50 and 60Hz (clamping at 5V)

Pin No.	Mark	I/O Division	Function	Check point	※ Discription
27	RESET	I	Reset input ON: "L", OFF: "H"	TRANSISTOR Q520 collector	 Usually H (=5V) but L for a period of a few to a few tens of milliseconds is first plugged in when the player
28	XCIN	I	Not used	—	
29	XCOUT	O	Not used	—	
30	XIN	I	Microcomputer clock OSC terminal	Z501 DECK 2 MECHA. side terminal	Oscillator waveform at 6MHz
31	XOUT	O	Microcomputer clock OSC terminal	Z501 DECK 1 MECHA. side terminal	Oscillator waveform at 6MHz
32	V_{SS}	—	Microcomputer GND	Connector CP5 ② pin	0V
33	POWER	O	Power control output ON: "H", OFF: "L"	Connector CP4 ③ pin	Power ON: "H" (=5V) Power OFF: "L" (=0V)
34	DMT	O	Line out mute signal output ON: "L", OFF: "H"	Connector CP4 ④ pin	"L" (=0V) when sound is being producedin the play or REC mode and "H" (=5V) when no sound is produced in the stop or FF/REW mode.
35	STBC	O	DA converter strove signal output ON: "H", OFF: "L"	Connector CP4 ⑤ pin	 Usually
36	SDAC	O	DA converter data output ON: "L", OFF: "H"	Connector CP4 ⑥ pin	 Usually
37	SCKC	O	DA converter serial clock output ON: "L", OFF: "H"	Connector CP4 ⑦ pin	 Usually
38	STBE	O	E2PROM strove signal output ON: "H", OFF: "L"	Connector CP707 ③ pin	 (ex...FOR ↔ REV PLAY mode is changed)

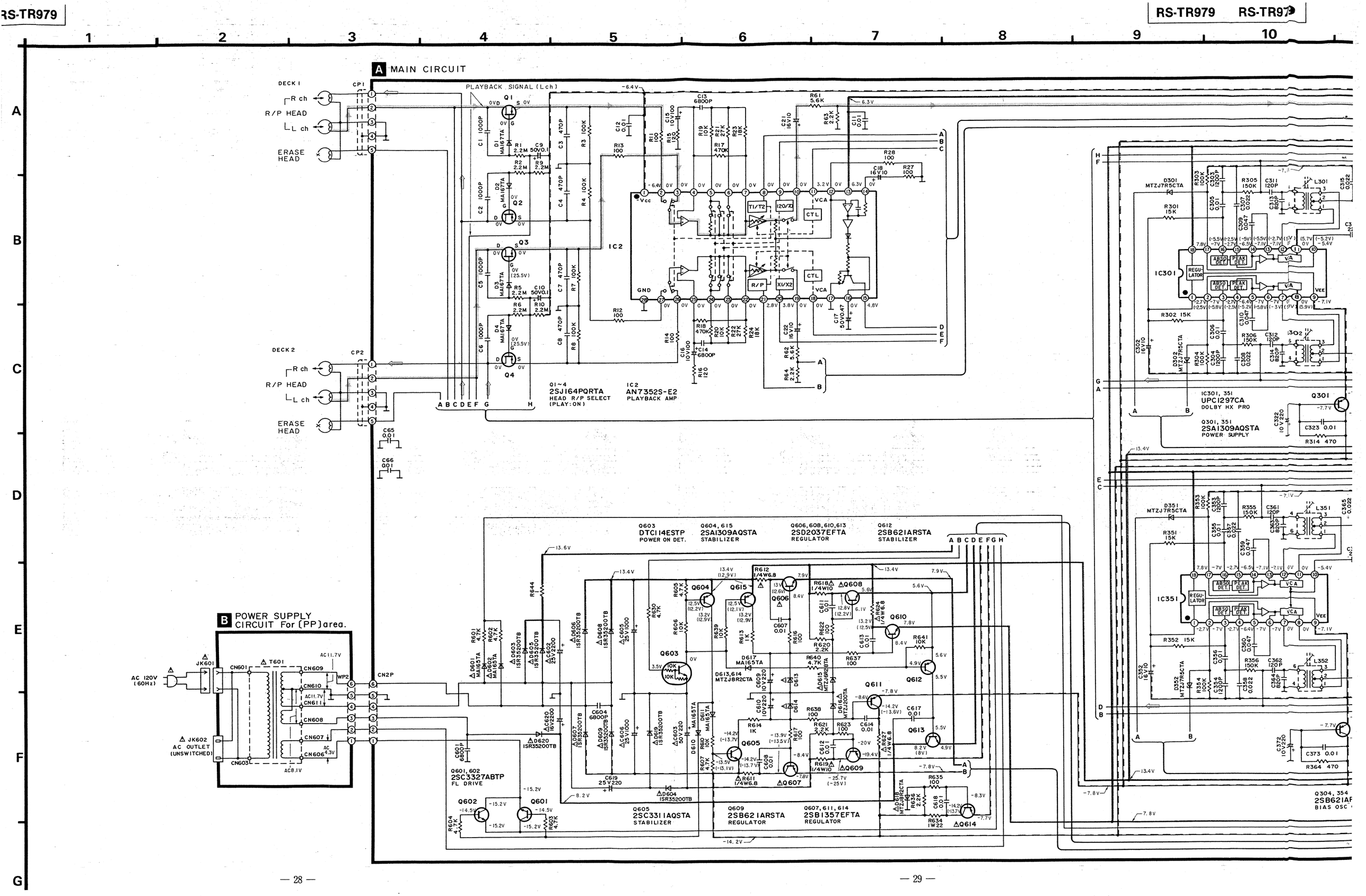
Pin No.	Mark	I/O Division	Function	Check point	※ Discription
39	SE2P	I/O	E2PROM serial data input/output	Connector CP707 ② pin	 (ex...FOR ↔ REV PLAY mode is changed) Waveform appears in response to 38 above.
40	SCKE	O	E2PROM serial clock output ON: "L", OFF: "H"	Connector CP707 ① pin	Waveform appears in response to 38 above.
41 ⟆ 48	8G ⟆ 1G	O	FL meter glid output ON: "H", OFF: "L"	FL501 ⑤～⑫ pin	
49 ⟆ 64	Sp ⟆ Sa	O	FL meter segment output ON: "H", OFF: "L"	F5501 ⑬～㉔ pin	
65	CAPM1	O	Deck 1 capstan motor ON/OFF control output ON: "H", OFF: "L"	Connector CP503 ⑥ pin	DECK 1 STOP mode: "L" (=0V) PLAY mode:"H" (=5V)
66	SPD1	O	Deck 1 motor speed selector output ON: "H", OFF: "L"	Connector CP5 ⑩ pin	X2 Edit mode (DECK 1 motor): "L" Other: "H"
67	CAPM2	O	Deck 2 capstan motor ON/OFF control output ON: "H", OFF: "L"	Connector CP503 ⑦ pin	DECK 2 STOP mode: "L" (=0V) PLAY mode: "H" (=5V)
68	SPD2	O	Deck 2 motor speed selector output ON: "H", OFF: "L"	Connector CP6 ① pin	X2 Edit mode (DECK 2 motor): "L" Other: "H"
69	RMF1	O	Deck 1 reel motor control output (+) ON: "H", OFF: "L"	Connector CP503 ⑧ pin	DECK 1 STOP F. PLAY R. PLAY RMF1 L H L RMR1 L L H
70	RMR1	O	Deck 1 reel motor control output (−) ON: "H", OFF: "L"	Connector CP503 ⑨ pin	
71	RMF2	O	Deck 2 reel motor control output (+) ON: "H", OFF: "L"	Connector CP502 ① pin	DECK 2 STOP F. PLAY R. PLAY RMF2 L H L RMR2 L L H
72	RMR2	O	Deck 2 reel motor control output (−) ON: "H", OFF: "L"	Connector CP502 ② pin	
73	V_{CC}	I	Power supply terminal (A/D)	Connector CP5 ③ pin	+5V
74	V_{EE}	I	FL meter pull down voltage input terminal	Connector CP5 ⑨ pin	−20V

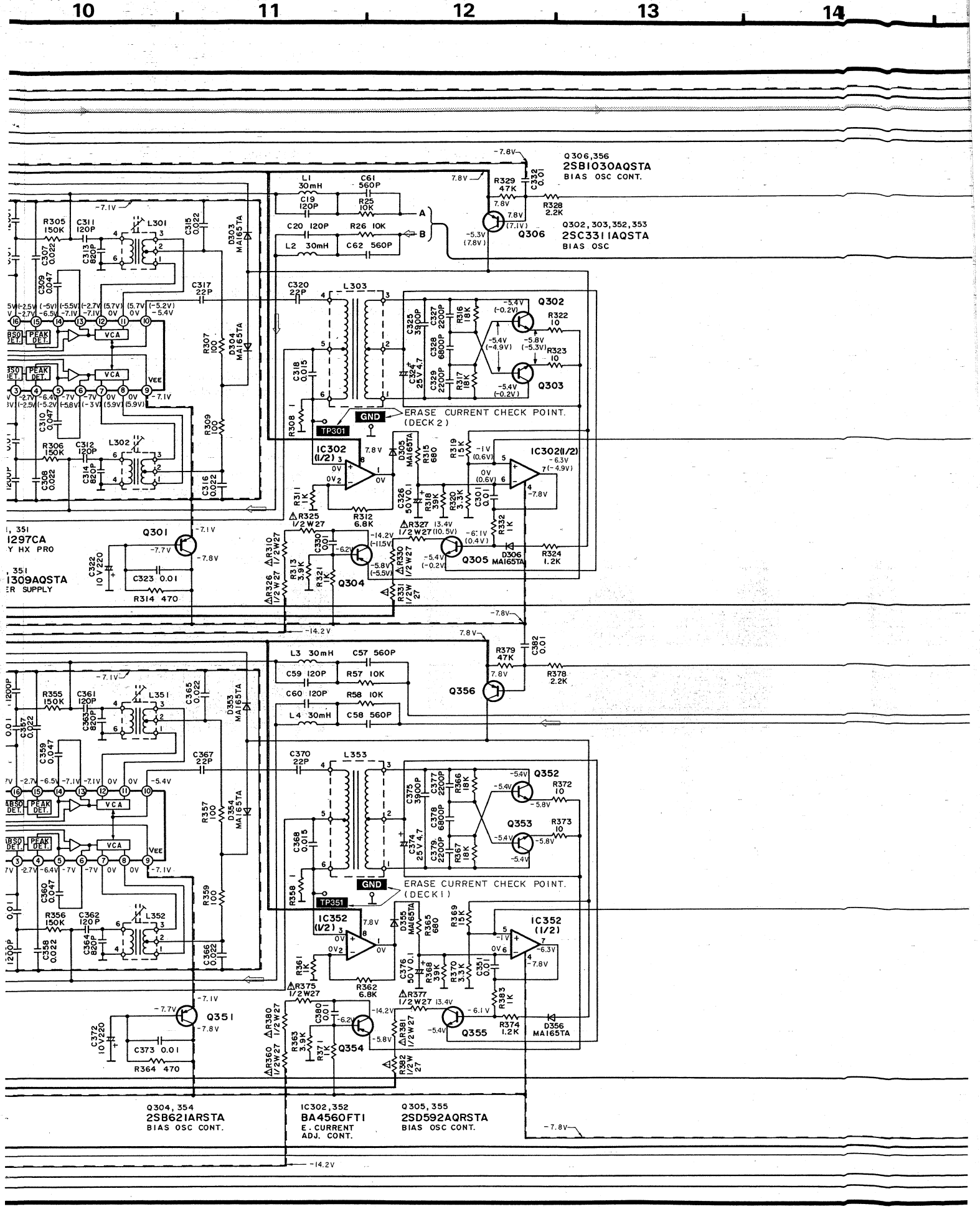
Pin No.	Mark	I/O Division	Function	Check point	※ Discription
75	AV_{SS}	—	GND terminal (A/D)	Connector CP5 ② pin	0V
76	V_{REF}	I	Reference power supply (+5V) (A/D)	Connector CP5 ④ pin	+5V
77	KEY1	I	Key switch input	Connector CP702 ③ pin	+5V without key input on deck 1 and 0V with the stop key ON. An analog value (0~5V) is used for each key ON.
78	KEY2	I	Key switch input	Connector CP702 ④ pin	+5V without key input on deck 2 and 0V with the stop key ON. An analog value (0~5V) is used for each key ON.
79	KEY3	I	Key switch input	Connector CP701 ② pin	An analog value from 0 to 5V appears when an input key for power, sync start, X1/X2, NR, reverse, modification or timer switch is pressed. +5V without any key inputs and 0V with the power key ON.
80	LCH	I	Lch indication level input	Connector CP3 ① pin	0V with no signal and approx. 1V with 0VU (120dB) input. The voltage varies from 0 to 5V for different input levels.

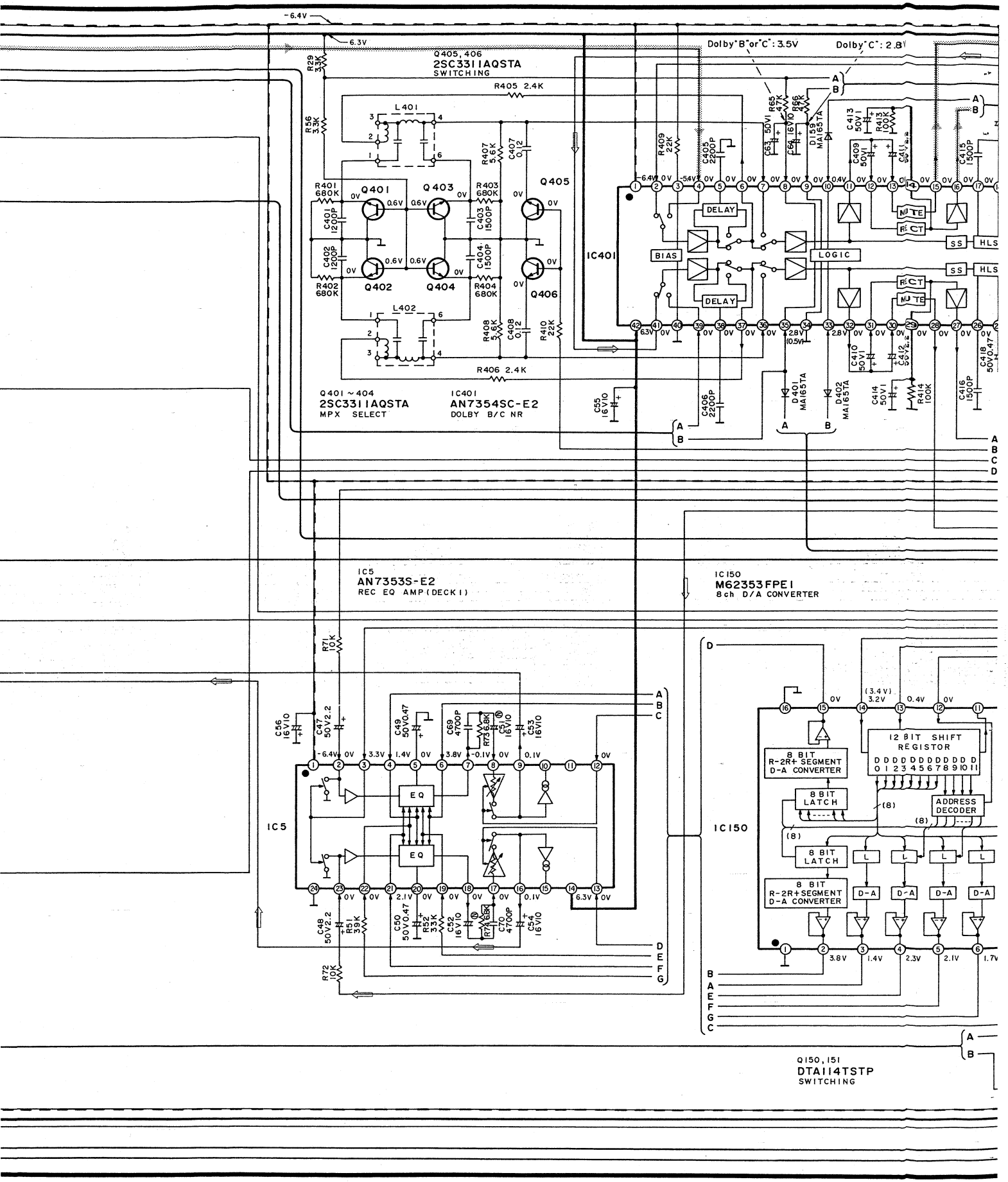
BLOCK DIAGRAM

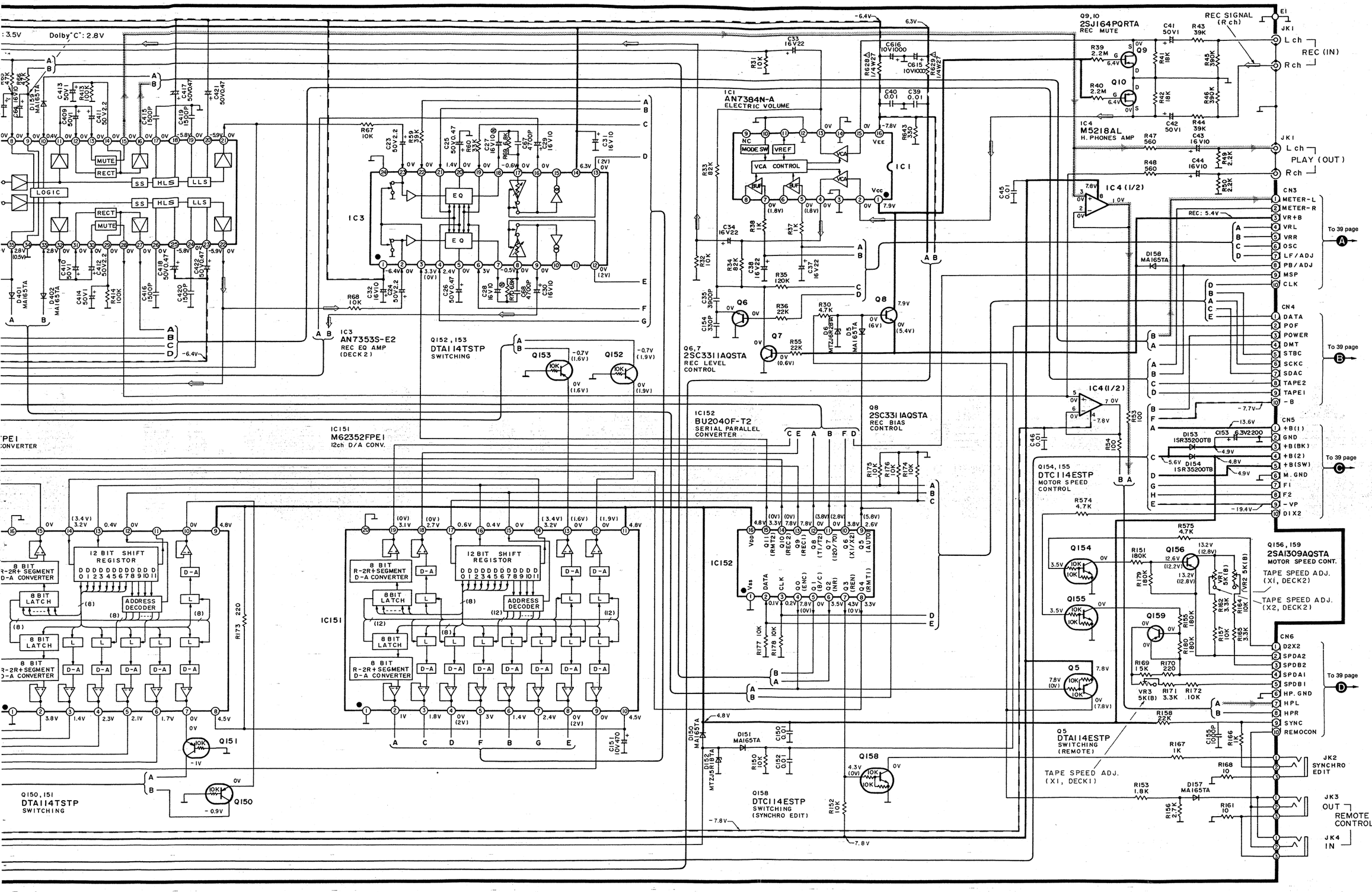


RS-TR979 RS-TR97




10
11
12
13
14
Q306,356
2SB1030AQSTA
BIAS OSC CONT.
Q302,303,352,353
2SC3311AQSTA
BIAS OSC
Q306
Q302
Q303
Q304
Q305
Q301
Q351
Q352
Q353
Q354
Q355
Q356
IC302 (1/2)
IC302(1/2)
IC352 (1/2)
IC352 (1/2)
ERASE CURRENT CHECK POINT. (DECK 2)
ERASE CURRENT CHECK POINT. (DECK 1)
GND
TP301
TP351
VCA
PEAK DET.
VEE
L301
L302
L303
L351
L352
L353
D303 MA165TA
D304 MA165TA
D305 MA165TA
D306 MA165TA
D353 MA165TA
D354 MA165TA
D355 MA165TA
D356 MA165TA
R314 470
R324 1.2K
R328 2.2K
R329 47K
R332 1K
R364 470
R374 1.2K
R378 2.2K
R379 47K
Q304, 354
2SB621ARSTA
BIAS OSC CONT.
IC302, 352
BA4560FTI
E. CURRENT ADJ. CONT.
Q305, 355
2SD592AQRSTA
BIAS OSC CONT.


-6.4V
6.3V
Q405, 406
2SC3311AQSTA
SWITCHING
R405 2.4K
L401
L402
R406 2.4K
Q401
Q402
Q403
Q404
Q405
Q406
Q401~404
2SC3311AQSTA
MPX SELECT
IC401
AN7354SC-E2
DOLBY B/C NR
Dolby "B" or "C": 3.5V
Dolby "C": 2.8V
DELAY
BIAS
LOGIC
MUTE
RCT
SS
HLS
IC5
AN7353S-E2
REC EQ AMP (DECK 1)
EQ
IC150
M62353FPE1
8ch D/A CONVERTER
8 BIT R-2R+ SEGMENT D-A CONVERTER
12 BIT SHIFT REGISTOR
8 BIT LATCH
ADDRESS DECODER
D-A
Q150, 151
DTA114TSTP
SWITCHING



SCHEM

(This schem
new techn

Note 1:

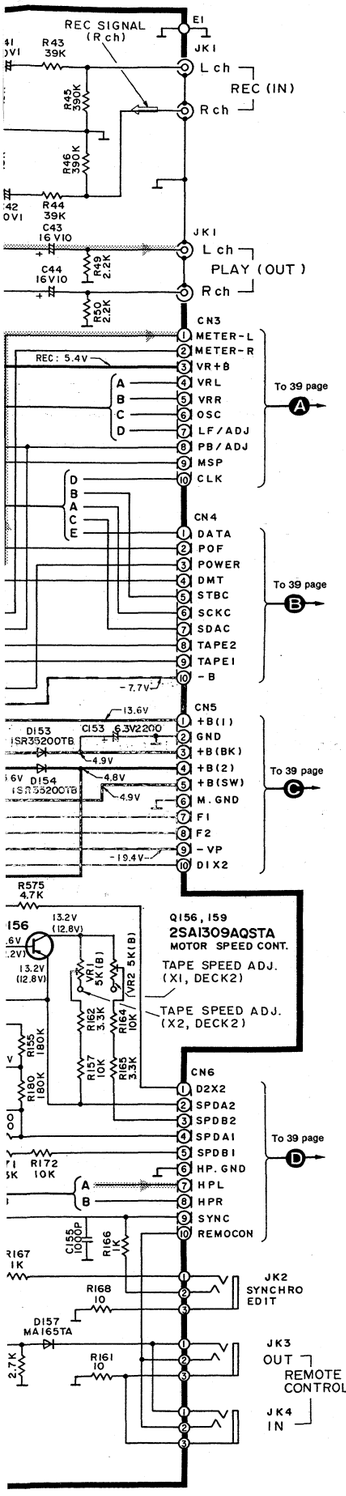
- S601: Voltage
- Resistance ar
  1 K=1,000 (Ω),
- Capacity are i
- All voltage val
  volume contro
  ( )..... Vo
  For measurem
- Important safe
  Components i
  When replacin
- (+B
- (−B
- ( )
- ( )
- The supply pa

Ref. No.
IC1
IC4
IC302, 352

Caution!

IC and LSI are
Secondary tro

- Cover the part
- Ground the so
- Put a conduct
- Do not touch t



■ SCHEMATIC DIAGRAM (Parts list on pages 59~64.)

(This schematic diagram may be modified at any time with the development of new technology.)

Note 1:

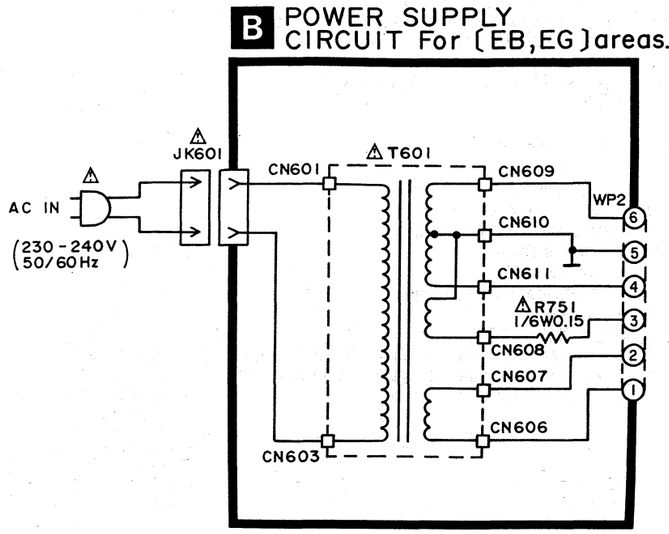
- S601: Voltage selector in **"240V"** position. (For [GC] area only.) (110V ↔ 127V ↔ 220V ↔ 240V)
- Resistance are in ohms (Ω), 1/4 watt unless specified otherwise.
  1K=1,000 (Ω), 1M=1,000k (Ω)
- Capacity are in micro-farads (μF) unless specified otherwise.
- All voltage values shown in circuitry are under no signal condition and playback mode with volume control at minimum position otherwise specified.
  ( ).....Voltage values at record mode.
  For measurement us EVM.
- Important safety notice
  Components identified by ⚠ mark have special characteristics important for safety.
  When replacing any of these components, use only manufacturer's specified parts.
- (▬▬<+B>▬▬) indicates +B (bias).
- (▬▬<−B>▬▬) indicates −B (bias).
- (⇒) indicates the flow of the playback signal.
- (⇨) indicates the flow of the record signal.
- The supply part number is described alone in the replacement parts list,

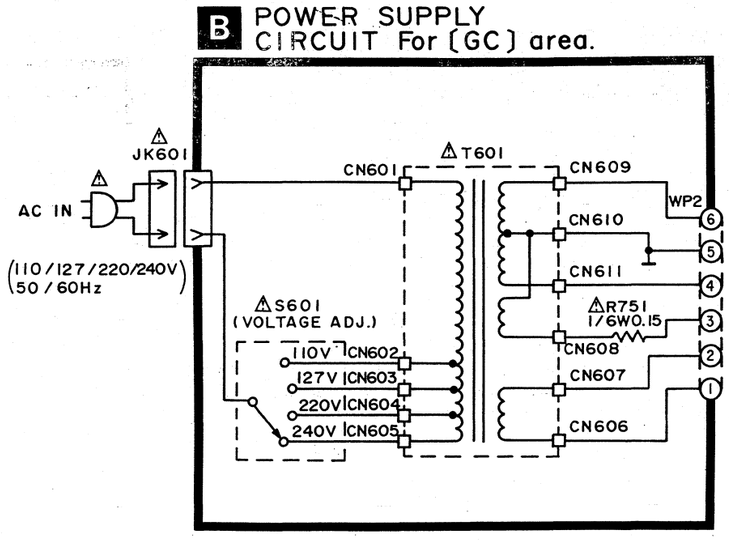
Ref. No.	Production Part No.	Supply Part No.
IC1	AN7384N-A	AN7384
IC4	M5218AL	M5218L
IC302, 352	BA4560FT1	SVIBA4560FT1

Caution!

IC and LSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminum foli.
- Ground the soldering iron.
- Put a conductive mat on the work table.
- Do not touch the legs of IC or LSI with the fingers directly.





RS-TR979 RS-TR979

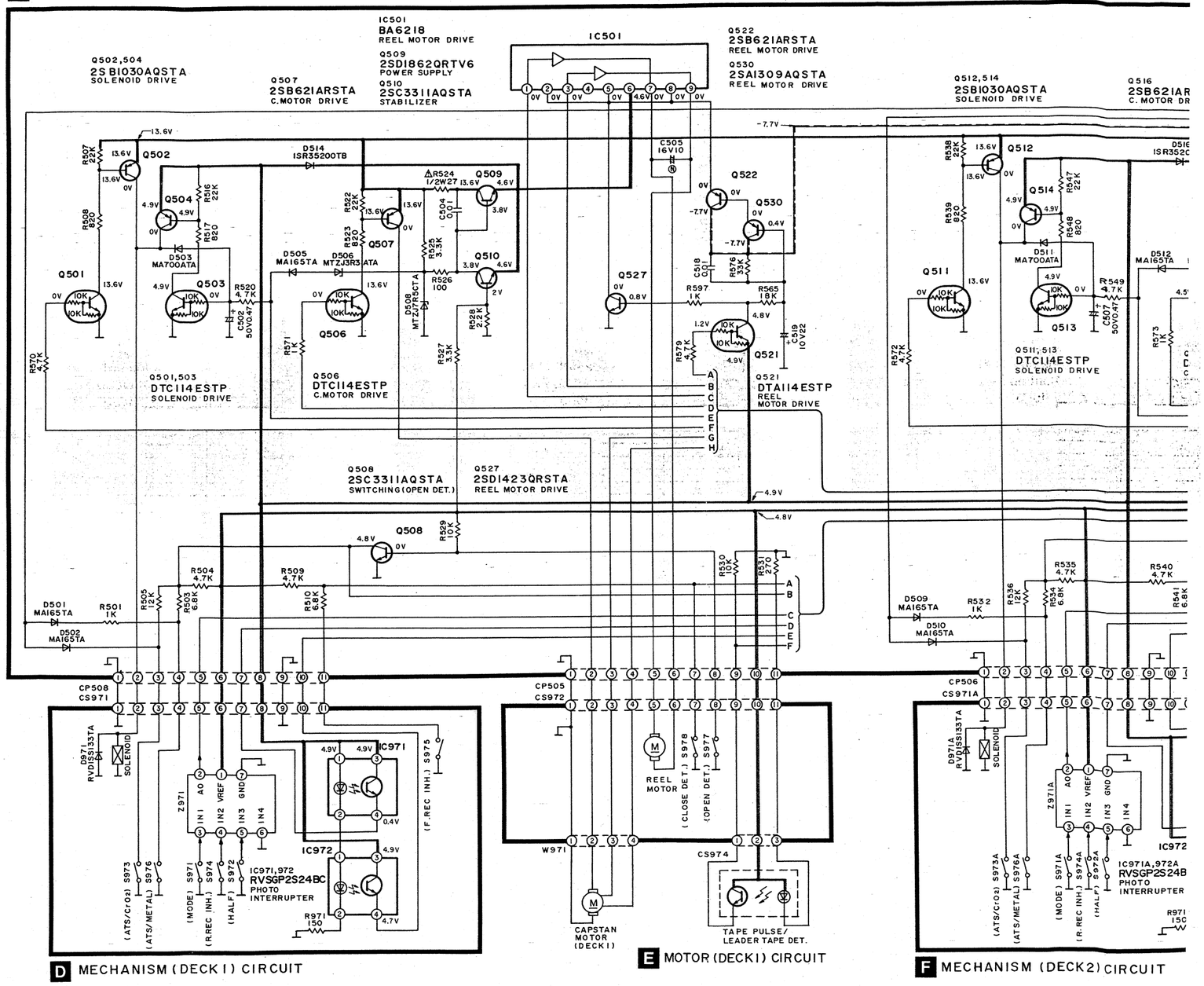
Note 2:

- S701 : Synchro-start switch (SYNCHRO START).
- S702 : Tape-to-tape recording-speed switch (SPEED; X1, X2).
- S703 : Dolby noise reduction switch (Dorby NR; B, C).
- S704 : Reverse-mode selector switch (REVERSE MODE; ⇄ , ⟲ , ∞).
- S705 : DECK 1 Fast-forward switch (▶▶ TPS).
- S706 : DECK 2 Fast-forward switch (▶▶ TPS).
- S707 : Power switch in "**on**" position (POWER/ ▬ standby ⏻ ▬ ON).
- S708 : DECK 2 Stop switch (■).
- S709 : DECK 1 Rewind switch (◀◀ TPS).
- S710 : DECK 2 Rewind switch (◀◀ TPS).
- S711 : DECK 1 Stop switch (■).
- S712 : DECK 2 Forward-side playback switch (▶).
- S713 : DECK 1 Forward-side playback switch (▶).
- S714 : DECK 2 Reverse-side playback switch (◀).
- S715 : DECK 1 Record switch (● REC).
- S716 : DECK 2 Record switch (● REC).
- S717 : DECK 1 Reverse-side playback switch (◀).
- S718 : DECK 1 Pause switch (▮▮).
- S719 : DECK 2 Pause switch (▮▮).
- S720 : DECK 1 Automatic-record-muting switch (AUTO REC MUTE).
- S721 : DECK 2 Automatic-record-muting switch (AUTO REC MUTE).
- S722 : DECK 1 Open/close switch (▲ OPEN/CLOSE).
- S723 : DECK 2 Open/close switch (▲ OPEN/CLOSE).
- S724 : DECK 2 Tape counter mode 2 switch (COUNTER MODE 2).
- S725 : DECK 1 Tape counter mode 1 switch (COUNTER MODE 1).
- S726 : DECK 2 Tape counter reset 2 switch (COUNTER RESET 2).
- S727 : DECK 1 Tape counter reset 1 switch (COUNTER RESET 1).
- S728 : DECK 1 ATC switch (ATC).
- S729 : DECK 2 ATC switch (ATC).
- S730 : Timer switch (TIMER).
- S971 : DECK 1 Mode switch in "**off**" position.
- S971A : DECK 2 Mode switch in "**off**" position.
- S972 : DECK 1 Cassette half detection switch in "**off**" position.
- S972A : DECK 2 Cassette half detection switch in "**off**" position.
- S973 : DECK 1 ATS (CrO_2) switch in "**off**" position.
- S973A : DECK 2 ATS (CrO_2) switch in "**off**" position.
- S974 : DECK 1 Reverse rec. inhibit switch in "**off**" position.
- S974A : DECK 2 Reverse rec. inhibit switch in "**off**" position.
- S975 : DECK 1 Forward rec. inhibit switch in "**off**" position.
- S975A : DECK 2 Forward rec. inhibit switch in "**off**" position.
- S976 : DECK 1 ATS (Metal) switch in "**off**" position.
- S976A : DECK 2 ATS (Metal) switch in "**off**" position.
- S977 : DECK 1 Cassette holder open detection switch.
- S977A : DECK 2 Cassette holder open detection switch.
- S978 : DECK 1 Cassette holder close detection switch.
- S978A : DECK 2 Cassette holder close detection switch.
- Resistance are in ohms (Ω), 1/4 watt unless specified otherwise. 1K=1,000 (Ω), 1M=1,000k (Ω)
- Capacity are in micro-farads (μF) unless specified otherwise.
- All voltage values shown in circuitry are under no signal condition and playback mode with volume control at minimum position otherwise specified.
  ( )..... Voltage values at record mode.
  For measurement us EVM.
- Important safety notice
  Components identified by ⚠ mark have special characteristics important for safety.
  When replacing any of these components, use only manufacturer's specified parts.
- (▬▬◁ +B ▷▬▬) indicates +B (bias).
- (▬▬◁ −B ▷▬▬) indicates −B (bias).
- (⋯⋯▷) indicates the flow of the playback signal.
- (⇨) indicates the flow of the record signal.

***Caution!**

IC and LSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.
*Cover the parts boxes made of plastics with aluminum foli.
*Ground the soldering iron.
*Put a conductive mat on the work table.
*Do not touch the legs of IC or LSI with the fingers directly.

C MOTOR CONTROL CIRCUIT



D MECHANISM (DECK 1) CIRCUIT

E MOTOR (DECK1) CIRCUIT

F MECHANISM (DECK2) CIRCUIT

9 10 11 12 13 14 15 16 17

Q522
2SB621ARSTA
REEL MOTOR DRIVE

Q530
2SAI309AQSTA
REEL MOTOR DRIVE

Q512,514
2SB1030AQSTA
SOLENOID DRIVE

Q516
2SB621ARSTA
C. MOTOR DRIVE

IC502
BA6218
REEL MOTOR DRIVE

Q518
2SD1862QRTV6
POWER SUPPLY

Q519
2SC3311AQSTA
STABILIZER

Q525
2SB621ARSTA
REEL MOTOR DRIVE

Q529
2SAI309AQSTA
REEL MOTOR DRIVE

Q511, 513
DTCI14ESTP
SOLENOID DRIVE

Q515
DTCI14ESTP
C. MOTOR DRIVE

Q521
DTAI14ESTP
REEL MOTOR DRIVE

Q524
DTAI14ESTP
REEL MOTOR DRIVE

Q517
2SC3311AQSTA
SWITCHING(OPEN DET.)

Q528
2SDI423QRSTA
REEL MOTOR DRIVE

D516 ISR35200TB
D512 MA165TA
D513 MTZJ3R3ATA
D515 MTZJ7R5CTA
D509 MA165TA
D510 MA165TA
D511 MA700ATA

IC971A
IC971A,972A
RVSGP2S24BC
PHOTO INTERRUPTER
IC972A

D971A RVDSS133TA
SOLENOID

REEL MOTOR
CAPSTAN MOTOR (DECK2)
TAPE PULSE/ LEADER TAPE DET.

IC503
MC14052BFR2
ANALOG MULTIPLEXER

IC504
MC14584BFR2
HEX SCHMITT TRIGGER

TEST TERMINAL

F MECHANISM (DECK2) CIRCUIT

G MOTOR (DECK2) CIRCUIT

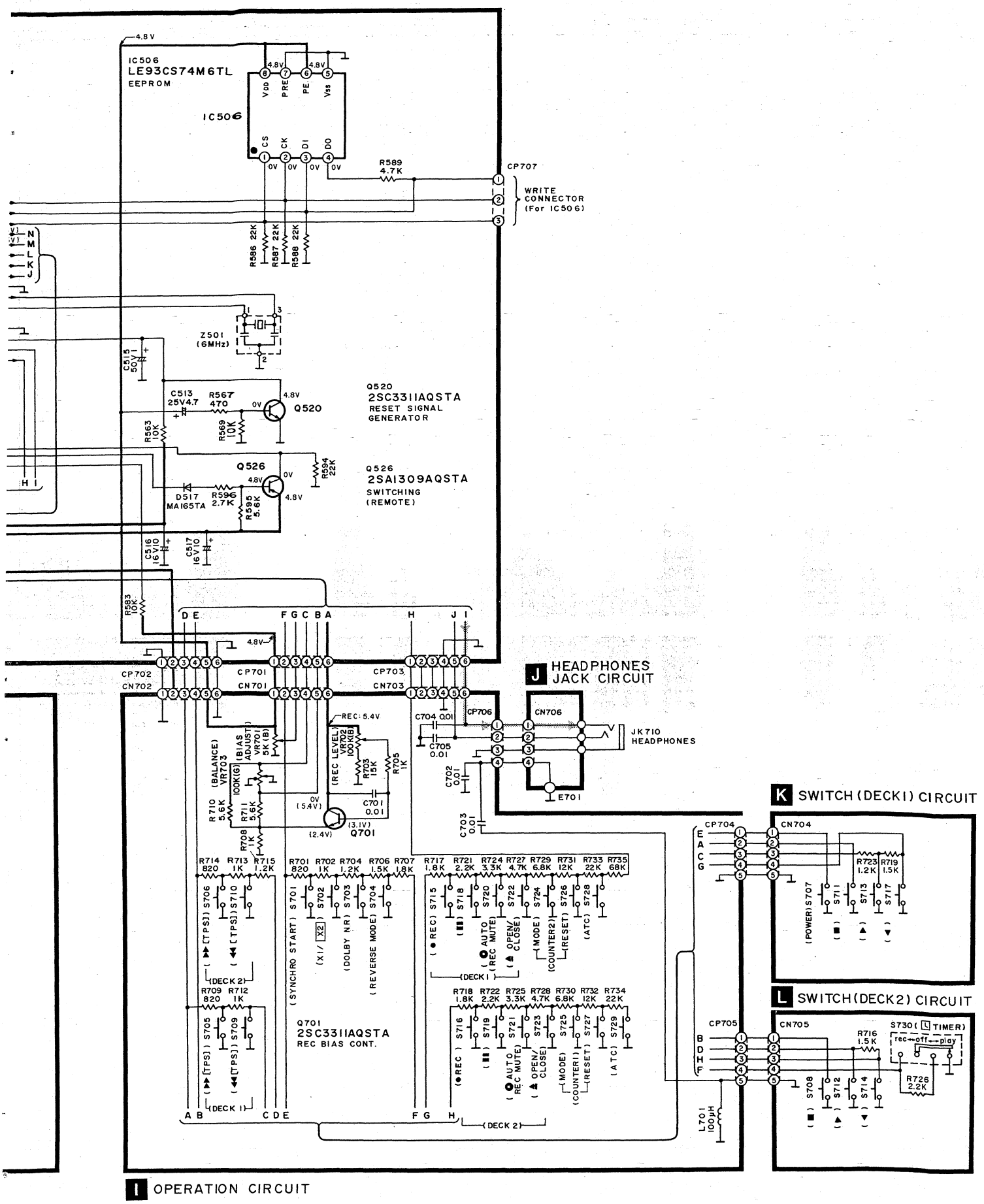
H FL CIRCUIT

FL501(RSL0139-F)
FL DISPLAY

IC505
M38172M4065F
MICROCOMPUTER

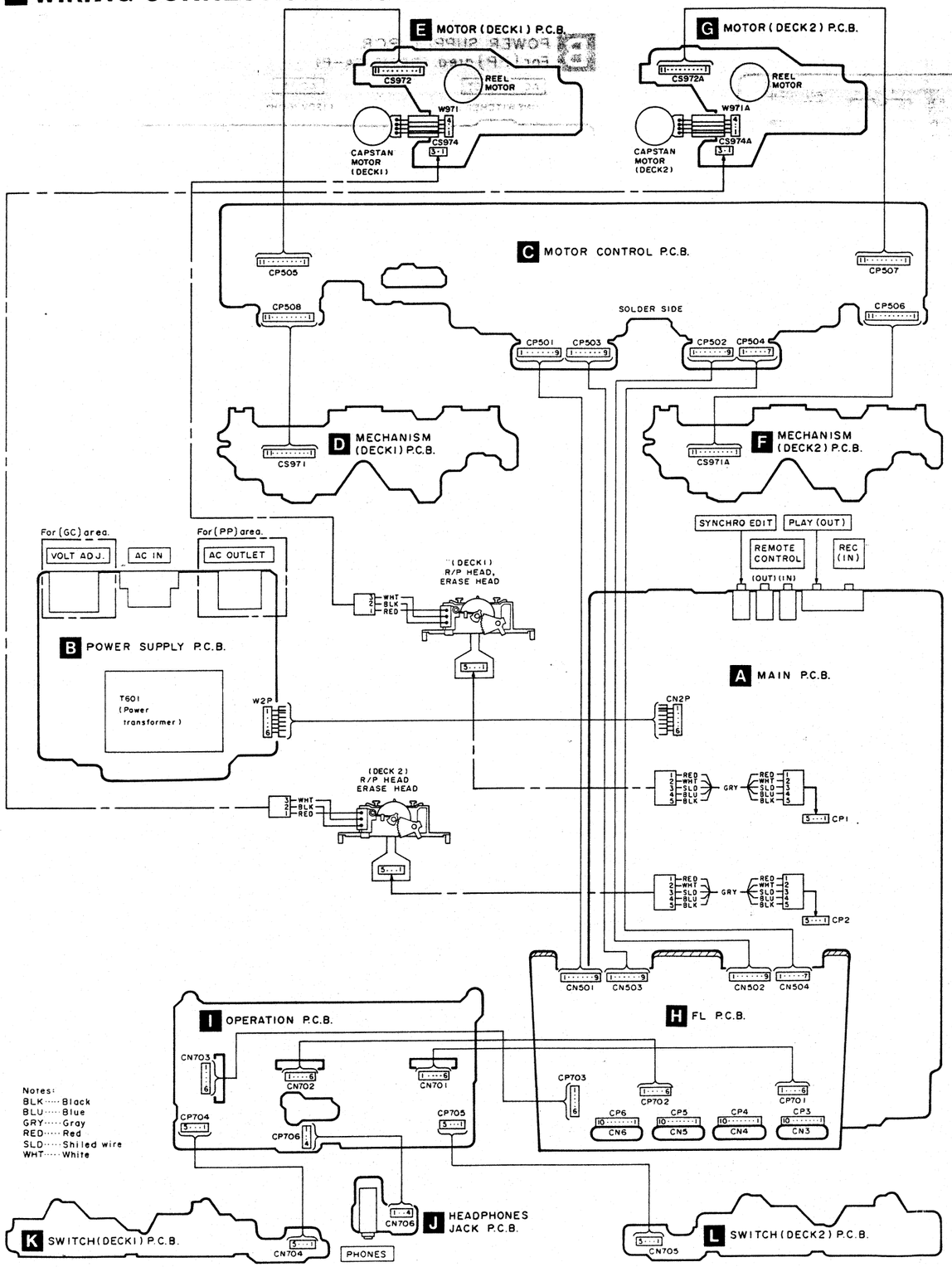
IC506
LE93CS
EEPROM

I OPI



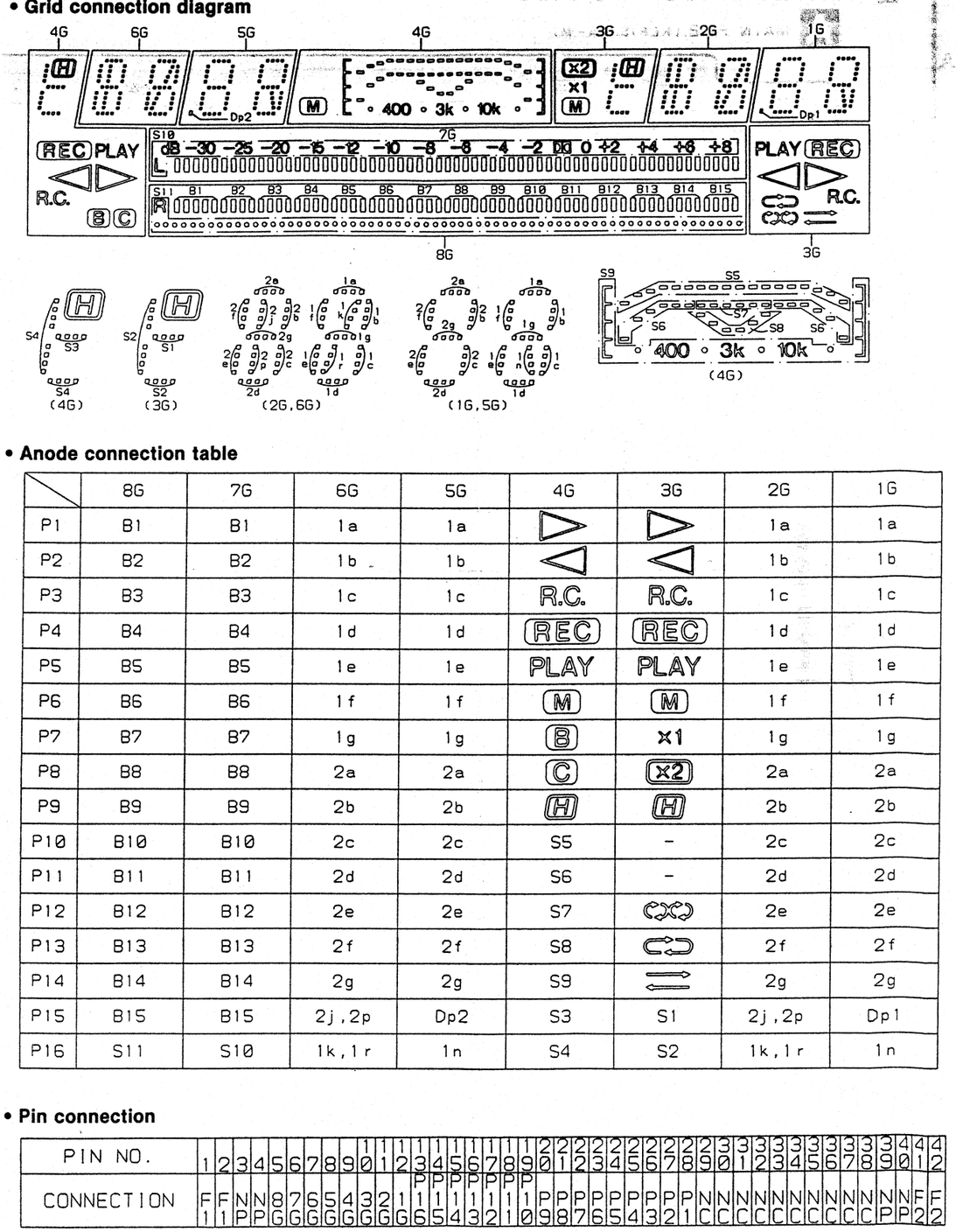
I OPERATION CIRCUIT

■ WIRING CONNECTION DIAGRAM



■ INTERNAL CONNECTION OF FL

• Grid connection diagram



• Anode connection table

	8G	7G	6G	5G	4G	3G	2G	1G
P1	B1	B1	1a	1a	▷	▷	1a	1a
P2	B2	B2	1b	1b	◁	◁	1b	1b
P3	B3	B3	1c	1c	R.C.	R.C.	1c	1c
P4	B4	B4	1d	1d	REC	REC	1d	1d
P5	B5	B5	1e	1e	PLAY	PLAY	1e	1e
P6	B6	B6	1f	1f	(M)	(M)	1f	1f
P7	B7	B7	1g	1g	(B)	×1	1g	1g
P8	B8	B8	2a	2a	(C)	(X2)	2a	2a
P9	B9	B9	2b	2b	(H)	(H)	2b	2b
P10	B10	B10	2c	2c	S5	-	2c	2c
P11	B11	B11	2d	2d	S6	-	2d	2d
P12	B12	B12	2e	2e	S7	⊂X⊃	2e	2e
P13	B13	B13	2f	2f	S8	⊂⊃	2f	2f
P14	B14	B14	2g	2g	S9	⇔	2g	2g
P15	B15	B15	2j,2p	Dp2	S3	S1	2j,2p	Dp1
P16	S11	S10	1k,1r	1n	S4	S2	1k,1r	1n

• Pin connection

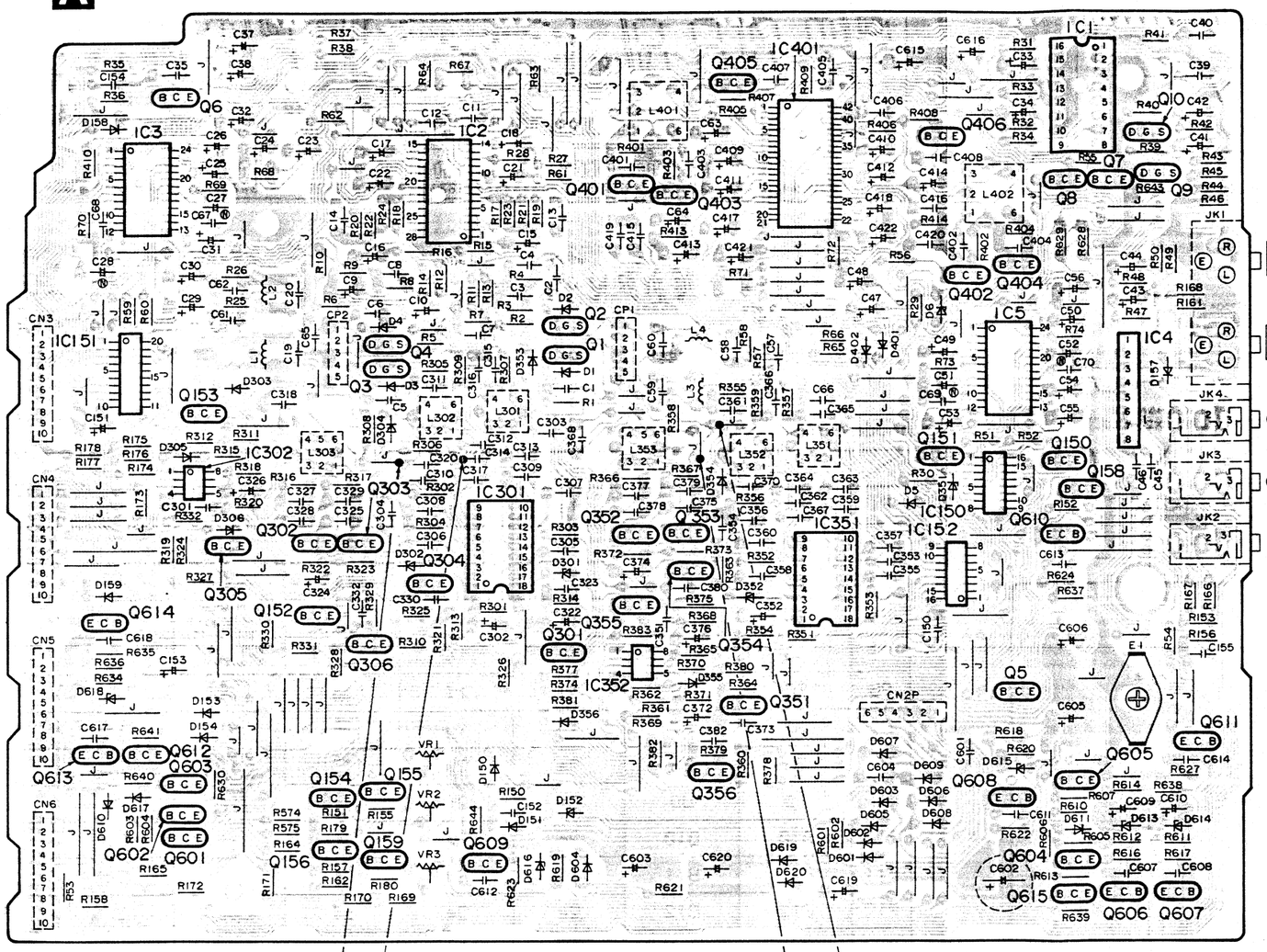
PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
CONNECTION	F1	F1	NP	NP	8G	7G	6G	5G	4G	3G	2G	1G	P16	P15	P14	P13	P12	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NP	NP	F2	F2

Note

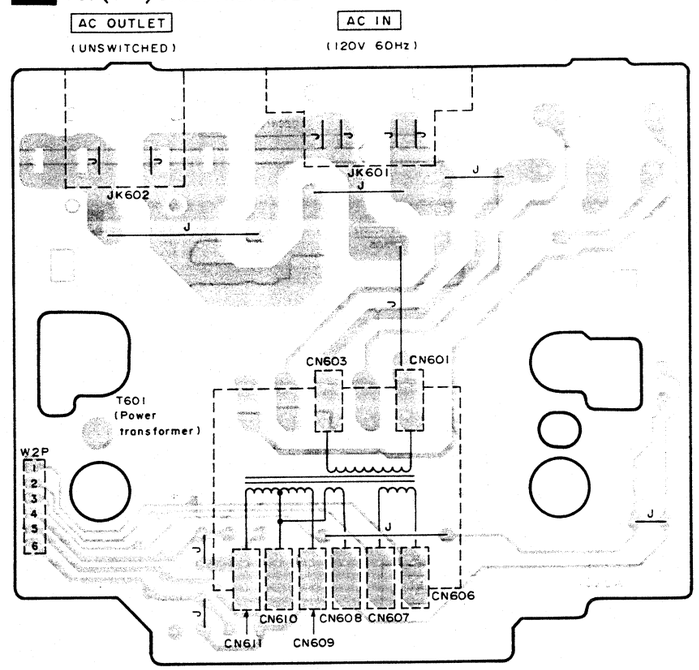
1) F1, F2 ..... Filament
2) NP ..... No pin
3) NC ..... No connection
4) 1G~8G ..... Grid

■ PRINTED CIRCUIT BOARDS

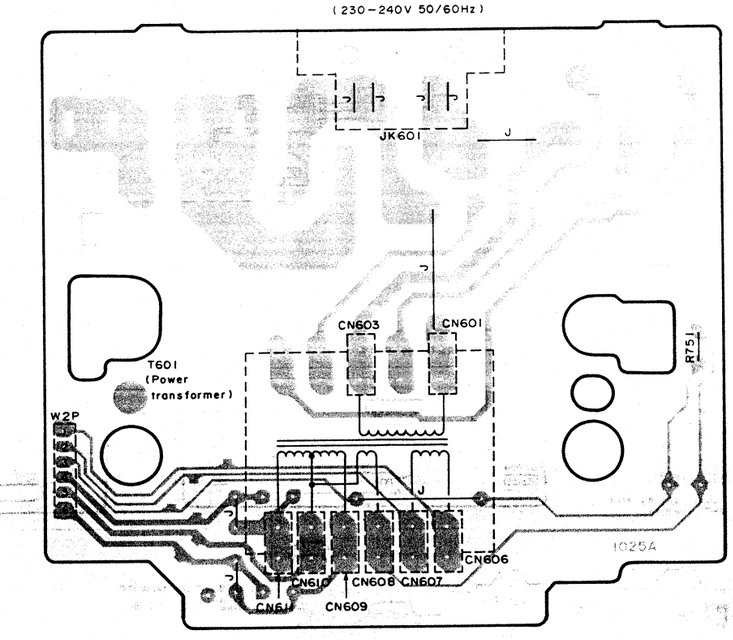
A MAIN P.C.B. (REP1500A-M)



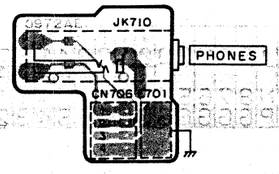
B POWER SUPPLY P.C.B. For (PP) area. (REP1502A-P)



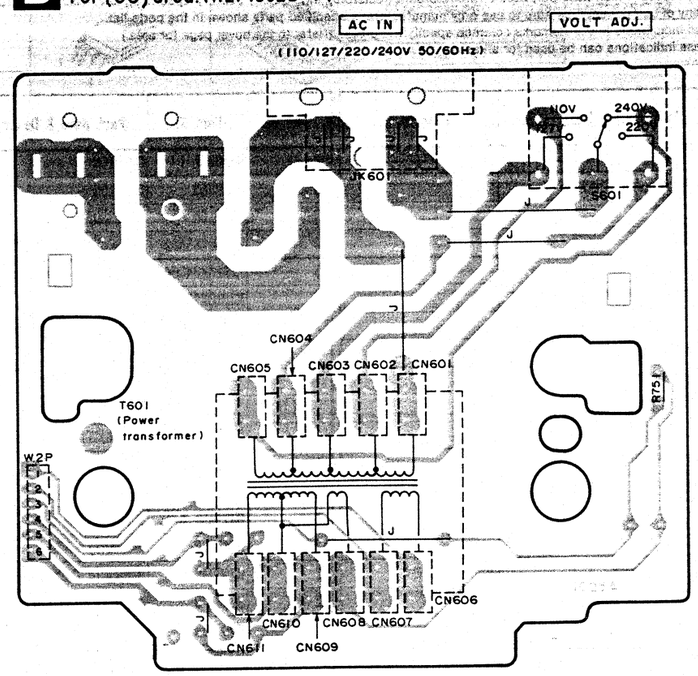
B POWER SUPPLY P.C.B. For (EB, EG) areas. (REP1502B-P)



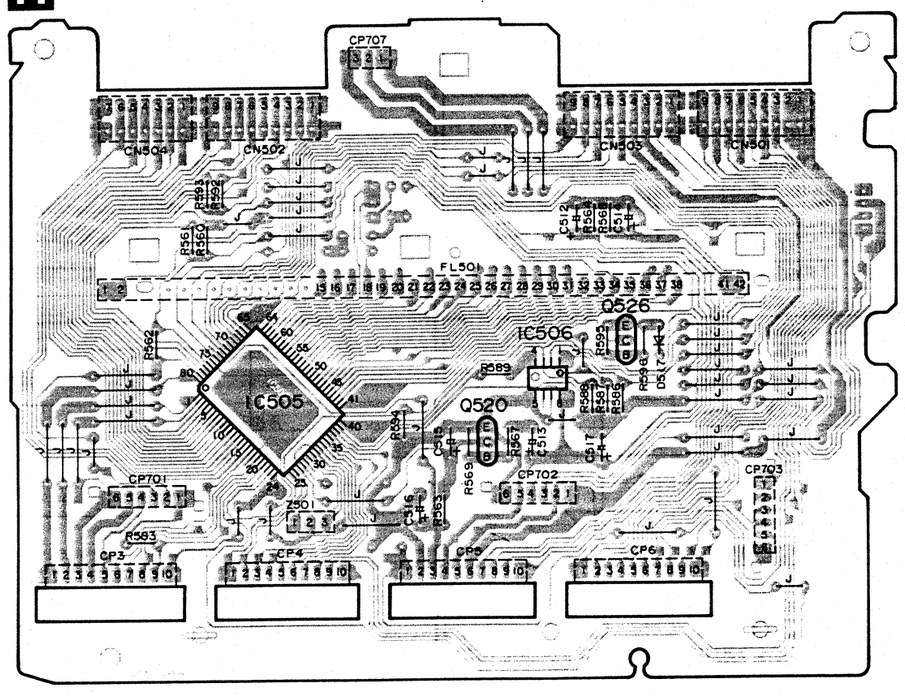
J HEADPHONES JACK P.C.B. (REP1501A-S)



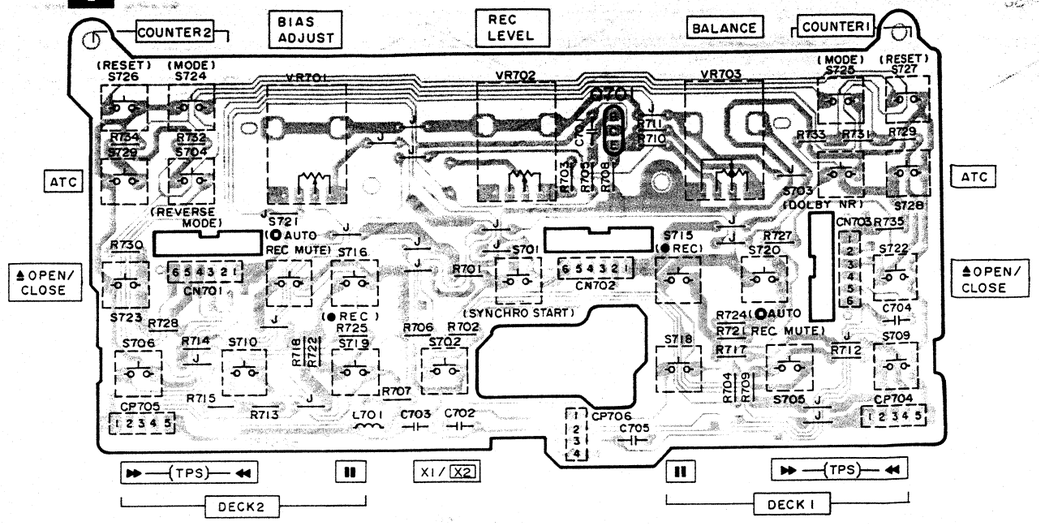
B POWER SUPPLY P.C.B. For (GC) area. (REP1502D-P)



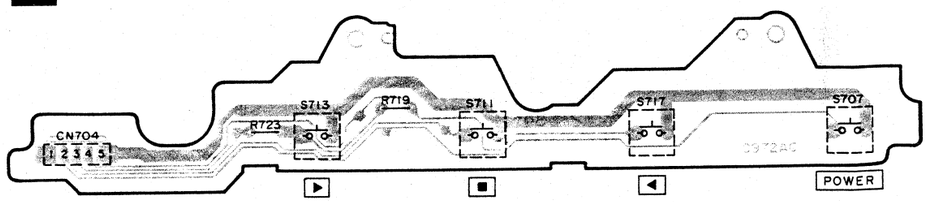
H FL P.C.B. (REP1501A-S)



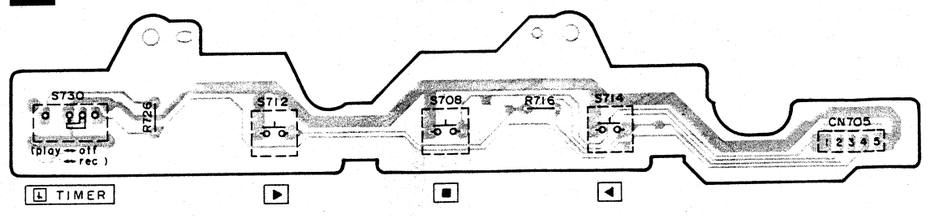
I OPERATION P.C.B. (REP1501A-S)



K SWITCH (DECK1) P.C.B. (REP1501A-S)

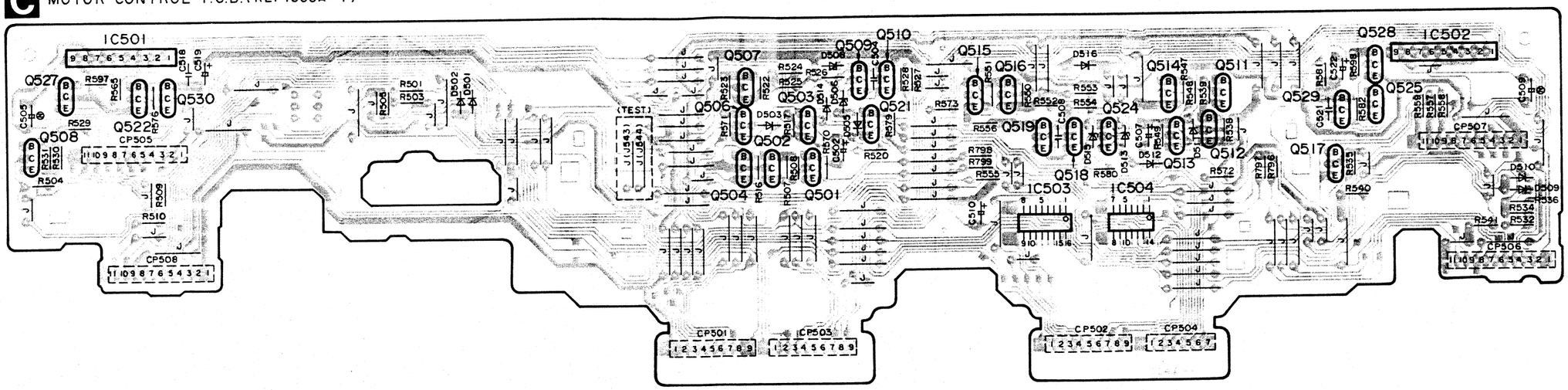


L SWITCH (DECK2) P.C.B. (REP1501A-S)

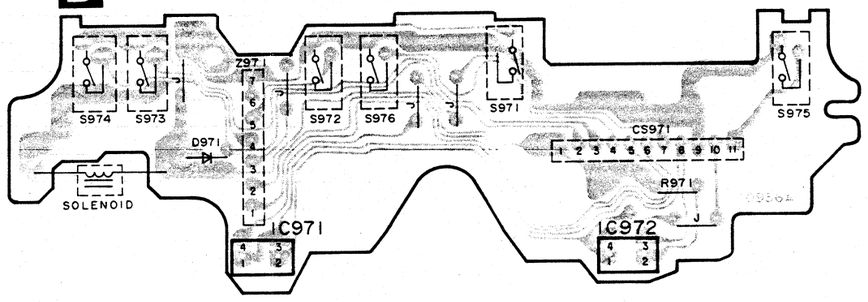


20 21 22 23 24 25 26 27 28 29

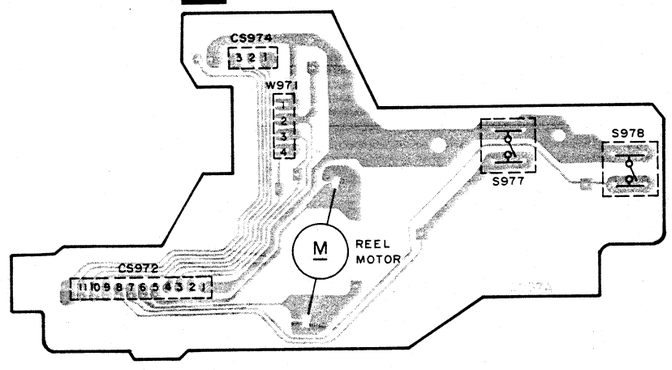
C MOTOR CONTROL P.C.B. (REP1566A-T)



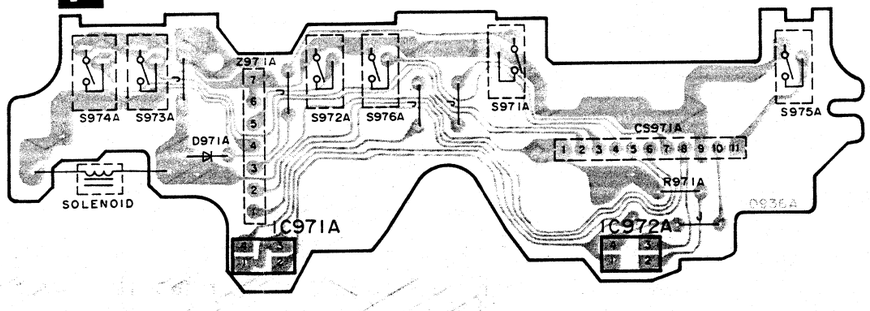
D MECHANISM (DECK1) P.C.B. (REP1493A)



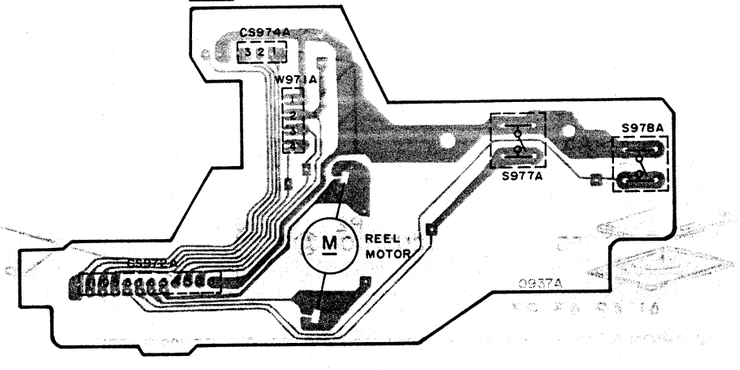
E MOTOR (DECK1) P.C.B. (REP1494A)



F MECHANISM (DECK2) P.C.B. (REP1493A)

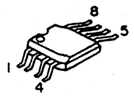


G MOTOR (DECK2) P.C.B. (REP1494A)



■ TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES

BA4560FT1



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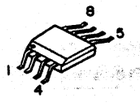
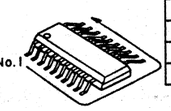
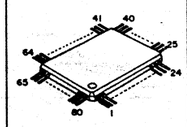




MC14584BFR2	14 Pin	AN7353S-E2	24 Pin
BU2040F-T2	16 Pin	AN7352S-E2	28 Pin
M62353FPE1	16 Pin	AN7354SC-E2	42 Pin
MC14052BFR2	16 Pin		
M62352FPE1	20 Pin		

M38172M4065F



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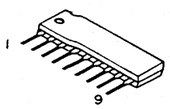

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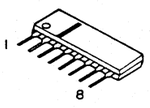
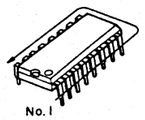
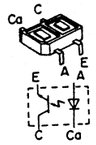


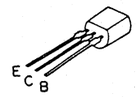


AN7384N-A	16 Pin
UPC1297CA	18 Pin

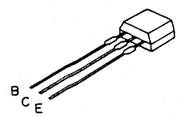
RVSGP2S24BC

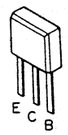


2SB621ARSTA
2SD592AQRSTA



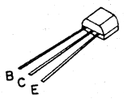
DTA114ESTP
DTA114TSTP
DTC114ESTP



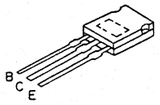


2SA1309AQSTA
2SB1030AQSTA
2SC3311AQSTA
2SD1423QRSTA

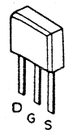
2SC3327ABTP



2SB1357EFTA
2SD2037EFTA



2SJ164PQRTA



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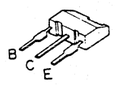
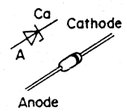
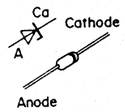




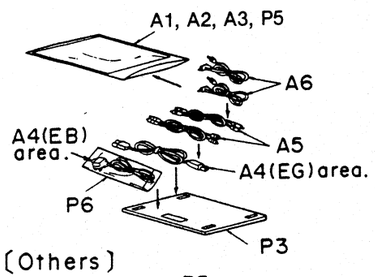
MA165TA
MA167TA
MA700TA
1SR35200TB
RVD1SS133TA



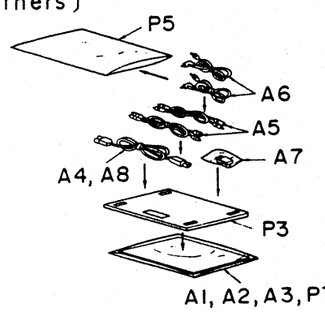
MTZJ3R3ATA
MTZJ5R1BTA
MTZJ6R2BTA
MTZJ7R5CTA
MTZJ8R2CTA
MTZJ20DTA

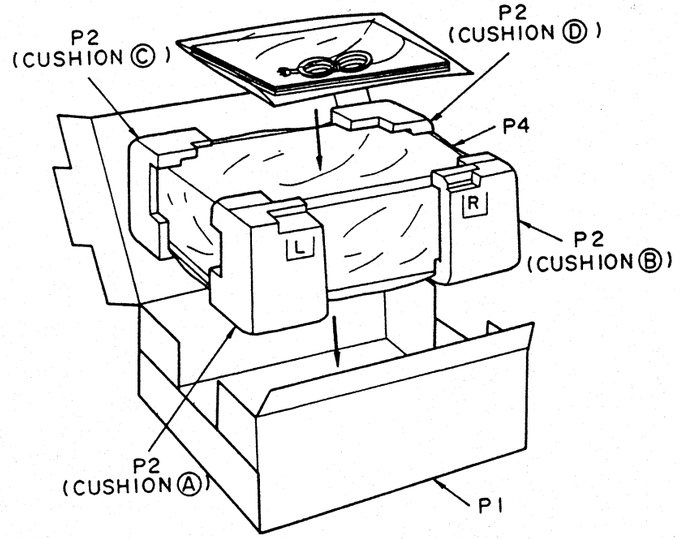
■ PACKAGING

〔(EB, EG) areas.〕



〔Others〕





〈CUSHION Ⓐ, Ⓑ, Ⓒ, Ⓓ Part No.: RPN0662-1 (PP, EG, GC), RPN0663 (EB)〉

■ REPLACEMENT PARTS LIST

Notes: *Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.

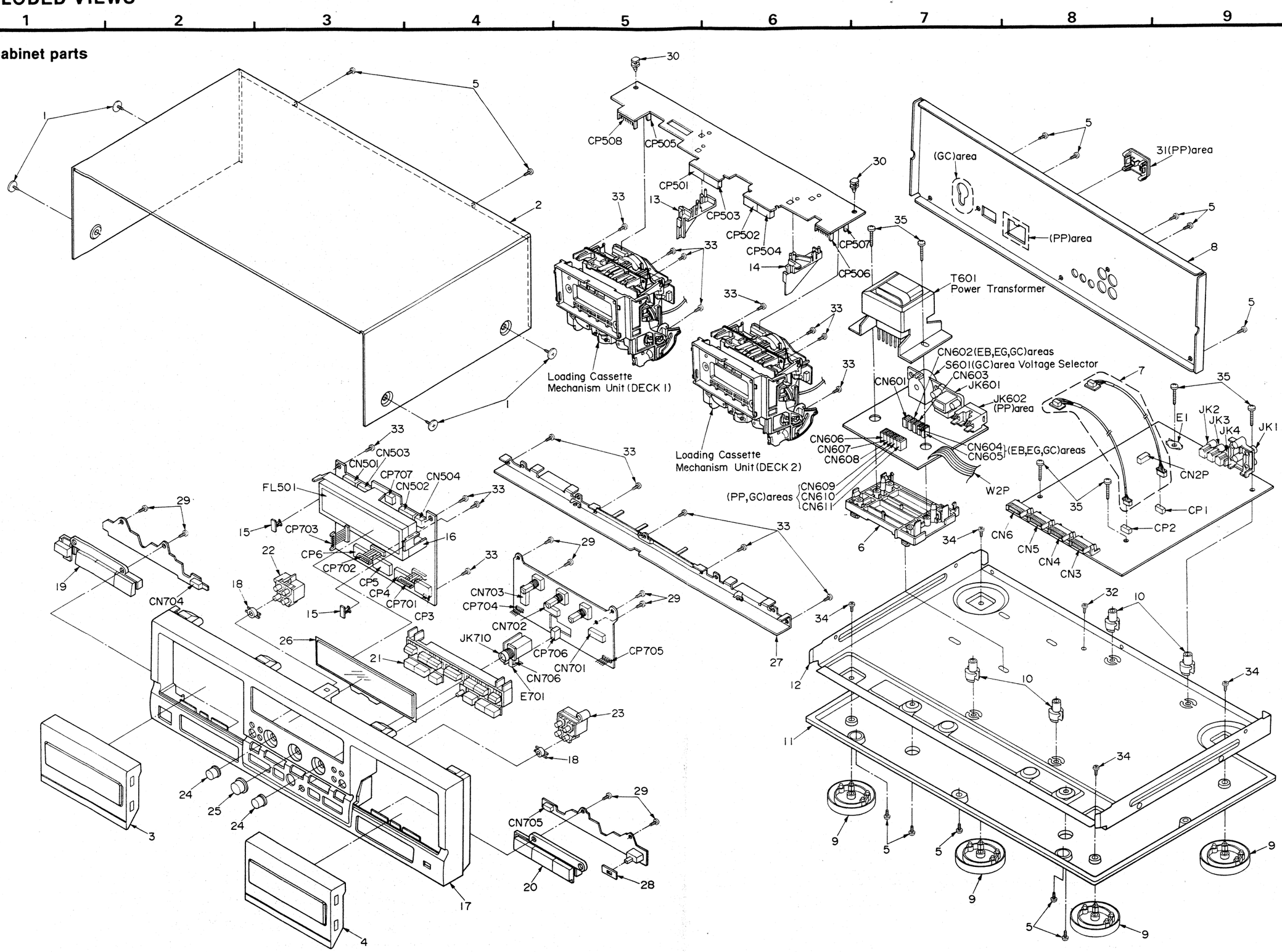
Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	RHD30035-K	SCREW	
2	RKM0016-K1	CABINET	
3	RYF0211-K	CASSETTE LID(DECK1)	
4	RYF0211A-K	CASSETTE LID(DECK2)	
5	XTBS3+8JFZ1	SCREW	
6	RMN0210	TRANSFORMER BASE	
7	REZ0574	CONNECTOR ASS'Y	
8	RGR0112G-A	REAR PANEL	(PP)
8	RGR0112H-A	REAR PANEL	(EG)
8	RGR0112H-B	REAR PANEL	(EB)
8	RGR0112I-A	REAR PANEL	(GC)
9	RKA0053-A	FOOT	
10	RKQ0089	P.C.B. HOLDER	
11	RKU0039	BOTTOM BOARD	
12	RMK0174-1	BOTTOM CHASSIS	
13	RMN0208	P.C.B. FIXED PIECE(L)	
14	RMN0209	P.C.B. FIXED PIECE(R)	
15	RMN0195	FL HOLD PIECE	
16	RMN0207	FL HOLDER	
17	RFKGSTR979PP	FRONT PANEL ASS'Y	
18	RGK0534-N	BUTTON ORNAMENT	
19	RGU0843-K	BUTTON, OPERATION(DECK1)	
20	RGU0844-K	BUTTON, OPERATION(DECK2)	
21	RFKNSTR979AK	BUTTON ASS'Y, OPERATION	
22	RFKNSTR979BK	BUTTON ASS'Y, COUNTER1	
23	RFKNSTR979CK	BUTTON ASS'Y, COUNTER2	
24	RGW0043	KNOB, BALANCE/BIAS ADJ.	
25	RGW0164-K	KNOB, REC LEVEL	
26	RKW0253-K	TRANSPARENT PLATE	
27	RMA0682	MECHANISM ANGLE	
28	RMZ0218	SPACER	
29	XTBS26+10J	SCREW	
30	SHR9806	MINI CARD SPACER	
31	SJS9331A	AC OUTLET COVER	(PP)
32	XTB3+10GFZ	SCREW	
33	XTB3+10JFZ	SCREW	
34	XTB3+16CFN	SCREW	
35	XTB3+20JFZ	SCREW	
		PACKING MATERIAL	
P1	RPG1423	PACKING CASE	(PP)
P1	RPG1424	PACKING CASE	(EB)
P1	RPG1545	PACKING CASE	(EG, GC)

Ref. No.	Part No.	Part Name & Description	Remarks
P2	RPN0662-1	CUSHION	(PP, EG, GC)
P2	RPN0663	CUSHION	(EB)
P3	RPQ0164	ACCESSORIES PAD	
P4	XZB50X65A02Z	PROTECTION COVER(THIS UNIT)	
P5	XZB24X34C04	PROTECTION BAG(F.B., ACC.)	
P6	XZB10X30C03	PROTECTION BAG(AC P.S.CORD)	(EB)
P7	RQX9467ZA	ENVELOPE FOR CANADA	
		ACCESSORIES	
A1	RFKSSTR979EG	INSTRUCTION MANUAL ASS'Y	(EG)
A1	RFKSSTR979GC	INSTRUCTION MANUAL ASS'Y	(GC)
A1	RFKSSTR979PP	INSTRUCTION MANUAL ASS'Y	(PP)
A1	RQT1751-B	INSTRUCTION MANUAL	(EB)
A2	RQA0013	WARRANTY CARD	(EB, EG)
A2	RQA0049	WARRANTY CARD FOR CANADA	
A2	SQX7179	WARRANTY CARD	(PP)
A3	RQCB0169	SERVICENTER LIST	(EB, EG, GC)
A3	RQCB0391	SERVICENTER LIST	(PP)
A3	SQX9131	SERVICENTER LIST FOR CANADA	
A4	RJA0019-2K	AC POWER SUPPLY CORD	(EG, GC)⚠
A4	SJA172	AC POWER SUPPLY CORD	(PP)⚠
A4	VJA0733	AC POWER SUPPLY CORD	(EB)⚠
A5	SJP2249-3	STEREO CONNECTION CABLE	
A6	SJP2257T	STEREO MINI CABLE	
A7	SJP5213-2	POWER PLUG ADAPTOR	(GC)⚠
A8	RQLA0134	CAUTION LABEL(VOL. SELECTOR)	(GC)

RS-TR979

■ EXPLODED VIEWS

• **Cabinet parts**



Ref. No.	Part No.	Part Name & Description	Remarks
		LOADING CASSETTE MECH. PARTS	
DECK1			
101	RXQ0264	HEAD BLOCK(REC./PLAYBACK)	
101-1	RMQ0360	CONNECTOR HOLDER	
102	XTW2+5L	SCREW	
103	RFKRSTR979BK	HEAD BASE ASS'Y	
104	RMB0266	SPRING, FOR./REV. SIDE ROD	
105	RXM0036	FOR./REV. SIDE ROD	
106	RGQ0092-K	LIFTER	
107	RMB0272	SPRING, STABILIZER	
108	RMQ0319	STABILIZER	
109	RKF0284-K	CASSETTE HOLDER	
110	RML0275	LIFT ARM	
111	RDG0212	LIFT GEAR	
112	RFKRSTR979DK	DRESSING PLATE ASS'Y	
113	RXR0015	REEL TABLE	
114	RML0272	SWITCH LEVER	
115	RXP0048	PINCH ARM(R)	
115-1	RMB0260	SPRING, PINCH ARM(R)	
116	RXP0047	PINCH ARM(F)	
116-1	RMB0259	SPRING, PINCH ARM(F)	
117	RMM0091	BRAKE ROD	
118	RMB0261	SPRING, HEAD BASE	
119	RMB0262	SPRING, BRAKE ROD	
120	RFKRSTR979AK	CHASSIS ASS'Y	
121	RXG0030	FRICTION GEAR	
122	XTW2+6S	SCREW	
123	RWJ4704050XX	MOTOR WIRE(4P), W971	
124	REM0037	REEL MOTOR	
125	REM0036	CAPSTAN MOTOR	
126	RML0271	HOLDER HOOK	
127	RMB0268	SPRING, HOLDER HOOK	
128	RML0270	DRIVE LEVER	
129	RMQ0312	DRIVE RACK	
130	RMB0269	SPRING, DRIVE LEVER	
131	RMC0169	SHIELD PLATE	
132	RDG0209	INTERMEDIATE GEAR	
133	XTW26+12S	SCREW	
134	RFKRSTR979CK	SUB CHASSIS ASS'Y	
135	XTW26+6L	SCREW	
136	RHD26013	SCREW	
137	RMQ0314	SURASUTO SPACER	
138	RDG0206	LOADING GEAR	
139	RXF0040	FLYWHEEL(F)	
140	RXF0041	FLYWHEEL(R)	
141	RDV108ZA	BELT	
142	RSJ0003	SOLENOID	
143	RMS0398	MOVING IRON CORE	
144	RXL0089	IDLE GEAR	
145	RXG0029	REEL GEAR	

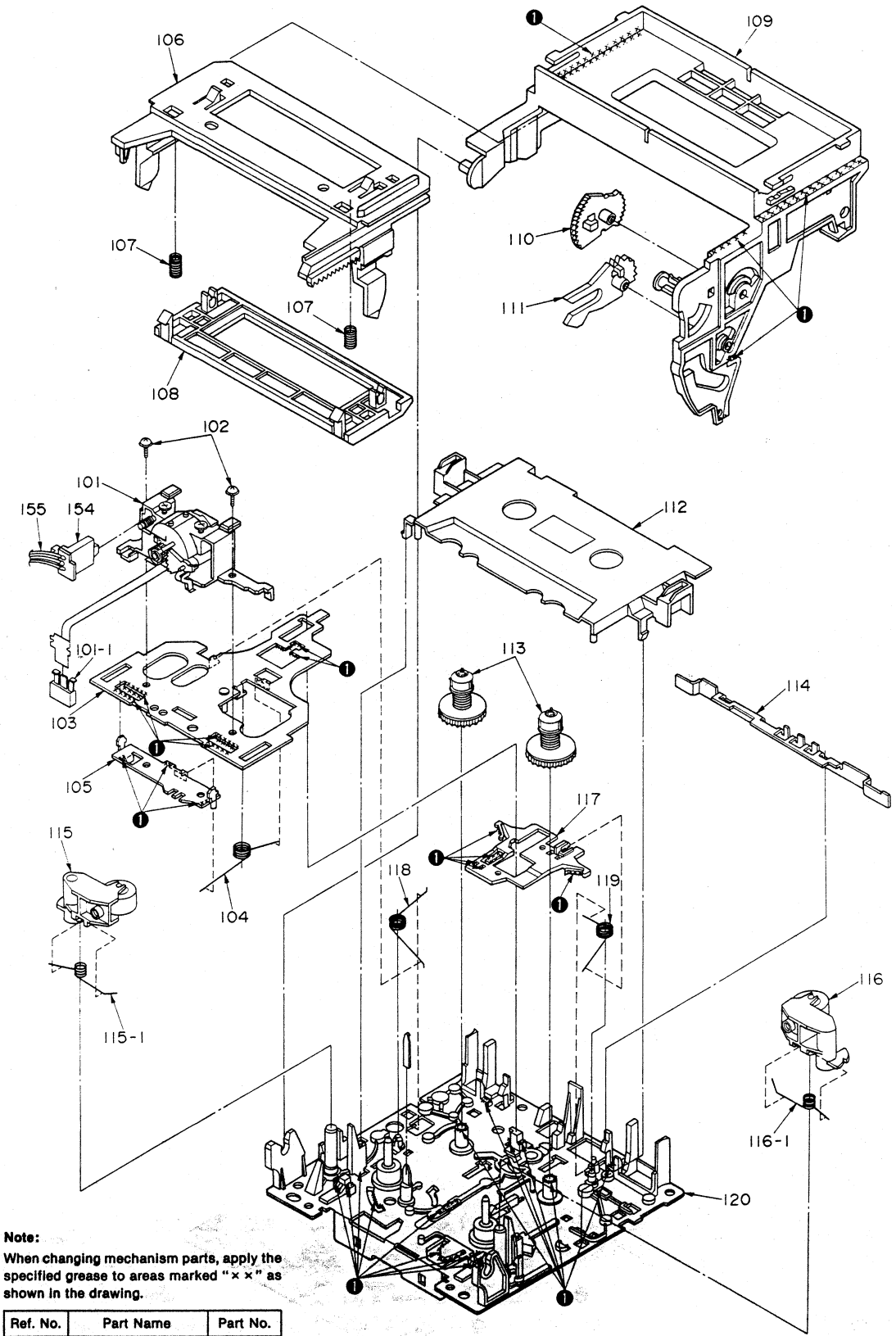
Ref. No.	Part No.	Part Name & Description	Remarks
146	RMB0263	SPRING(F)	
147	RMB0264	SPRING(R)	
148	RDK0019	MAIN GEAR	
149	RUS609ZC	SPRING, TAPE PRESSURE	
150	RML0267	TRIGGER LEVER	
151	RUW147ZA	SPRING, TRIGGER LEVER	
152	RML0268	FOR./REV. SIDE LEVER	
153	RMQ0368	HOLDER	
154	RVSSPI326-1	QUICK SENSOR	
155	REX0474	QUICK SENSOR WIRE(3P)	

■ EXPLODED VIEW

• **Loading cassette mechanism parts**

• **DECK 1**

(Top view)



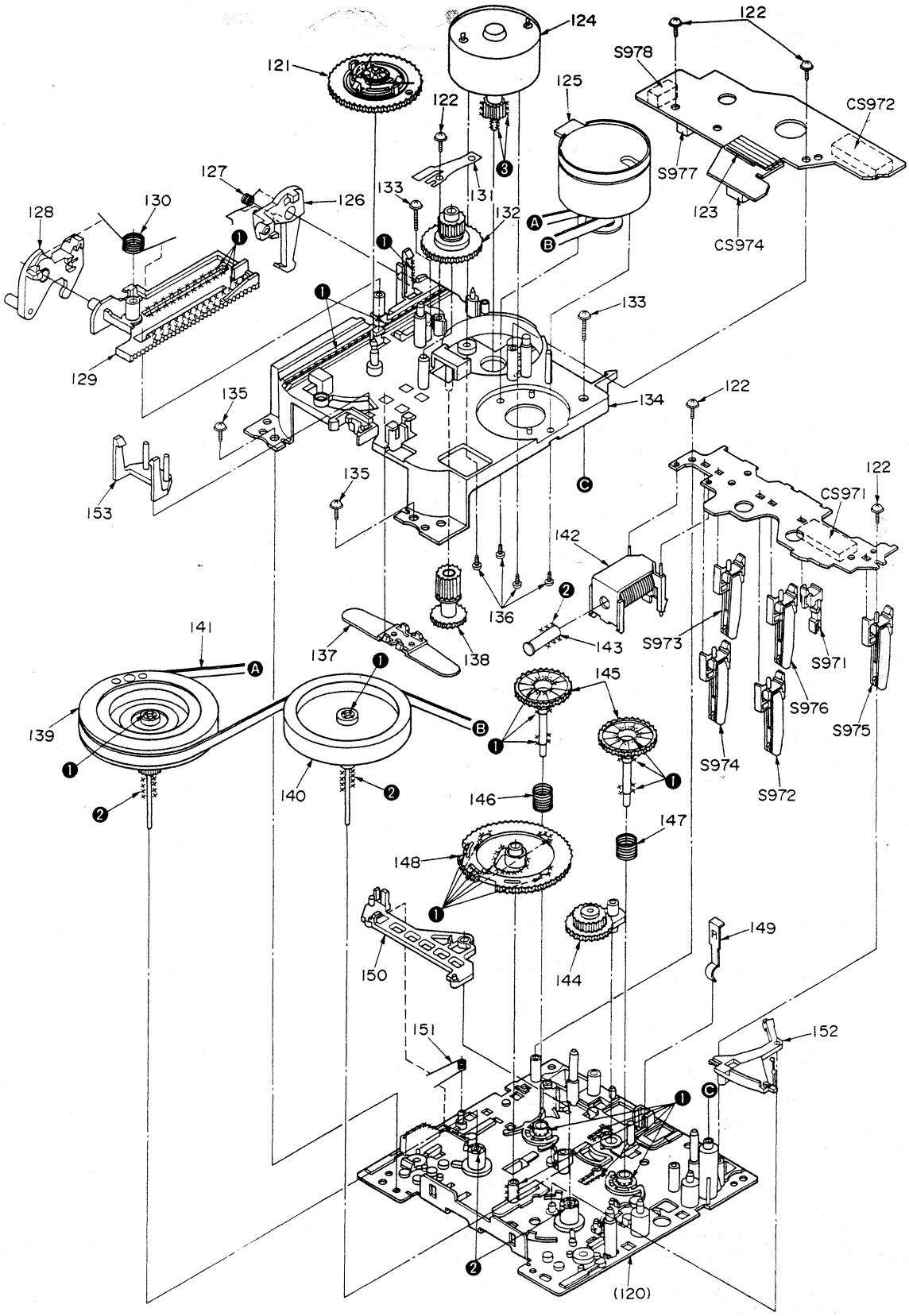
Note:

When changing mechanism parts, apply the specified grease to areas marked "× ×" as shown in the drawing.

Ref. No.	Part Name	Part No.
❶	FLOIL AK-152	SZZ0L18
❷	SWAFLUID #56	RZZ0L02
❸	MOLYCOAT EM-20L	RZZ0L05

6 7 8 9

(Bottom view)

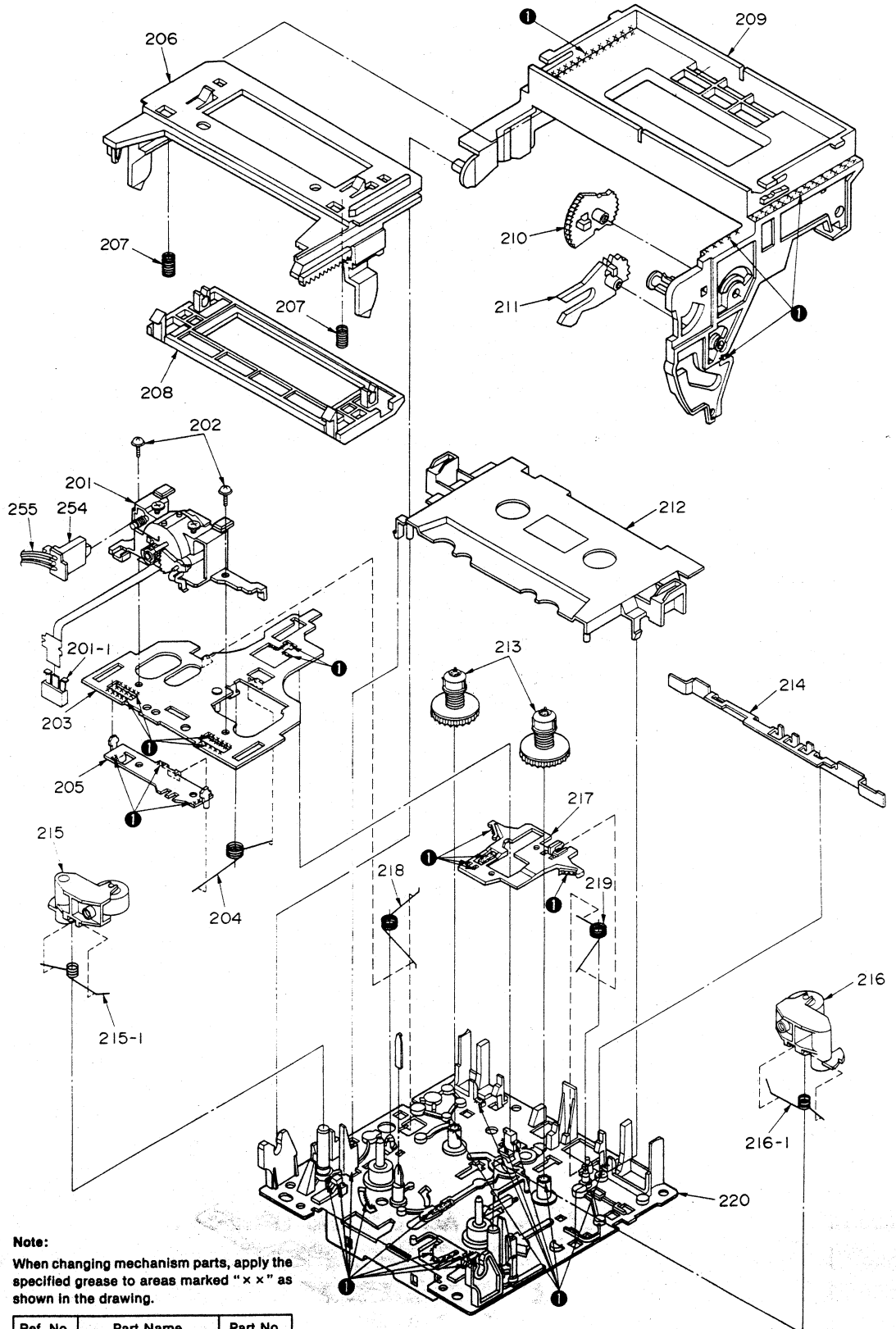


1 2 3 4

A B C D E F

- **Loading cassette mechanism parts**
- **DECK 2**

(Top view)



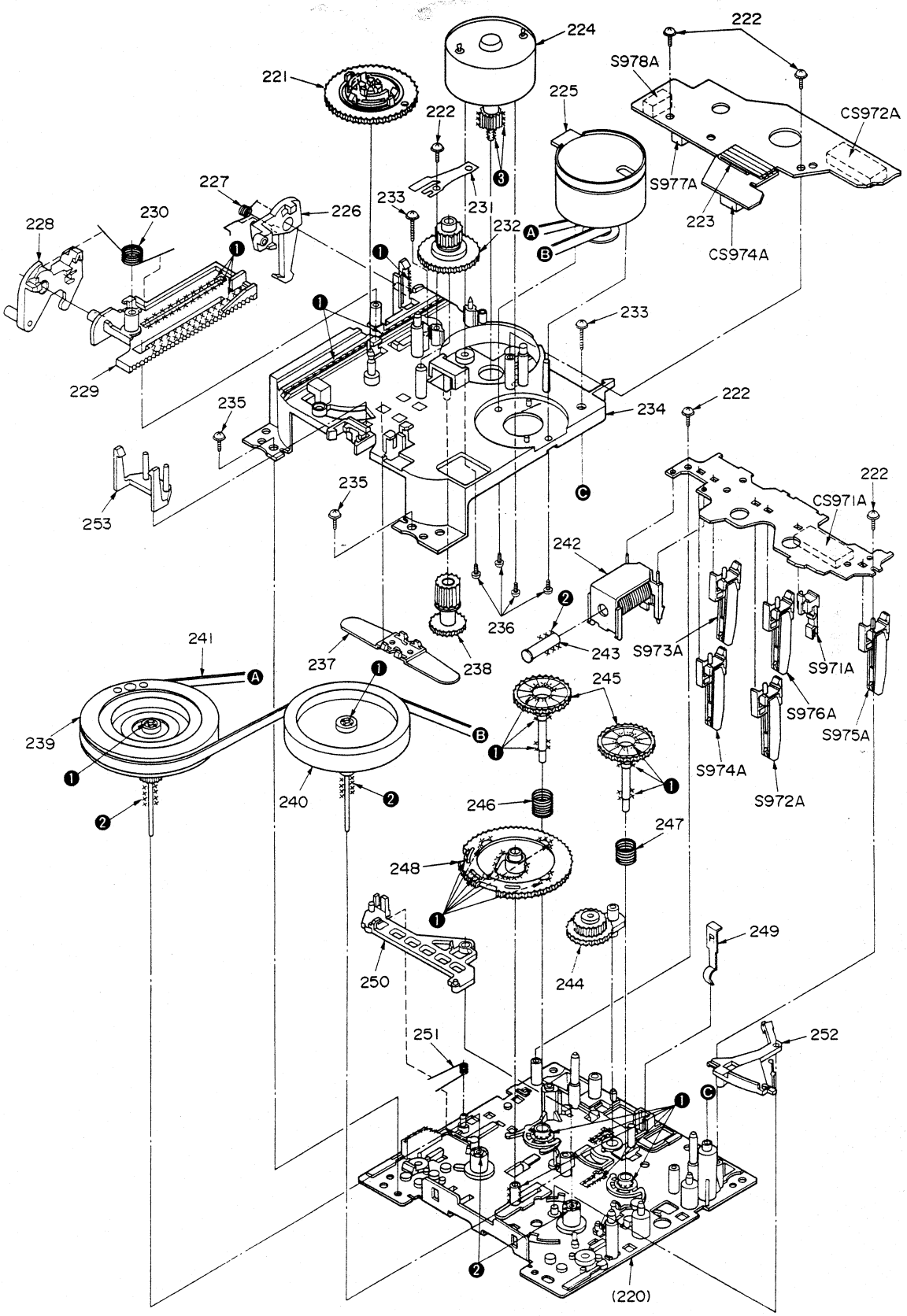
Note:

When changing mechanism parts, apply the specified grease to areas marked "× ×" as shown in the drawing.

Ref. No.	Part Name	Part No.
❶	FLOIL AK-152	SZZ0L18
❷	SWAFLUID #56	RZZ0L02
❸	MOLYCOAT EM-20L	RZZ0L05

5 6 7 8 9

(Bottom view)



■ REPLACEMENT PARTS LIST

Ref. No.	Part No.	Part Name & Description	Remarks
		LOADING CASSETTE MECH. PARTS	
DECK2			
201	RXQ0264	HEAD BLOCK(REC. /PLAYBACK)	
201-1	RMQ0360	CONNECTOR HOLDER	
202	XTW2+5L	SCREW	
203	RFKRSTR979BK	HEAD BASE ASS'Y	
204	RMB0266	SPRING, FOR /REV. SIDE ROD	
205	RXM0036	FOR /REV. SIDE ROD	
206	RGQ0092-K	LIFTER	
207	RMB0272	SPRING, STABILIZER	
208	RMQ0319	STABILIZER	
209	RKF0284-K	CASSETTE HOLDER	
210	RML0275	LIFT ARM	
211	RDG0212	LIFT GEAR	
212	RFKRSTR979DK	DRESSING PLATE ASS'Y	
213	RXR0015	REEL TABLE	
214	RML0272	SWITCH LEVER	
215	RXP0048	PINCH ARM(R)	
215-1	RMB0260	SPRING, PINCH ARM(R)	
216	RXP0047	PINCH ARM(F)	
216-1	RMB0259	SPRING, PINCH ARM(F)	
217	RMM0091	BRAKE ROD	
218	RMB0261	SPRING, HEAD BASE	
219	RMB0262	SPRING, BRAKE ROD	
220	RFKRSTR979AK	CHASSIS ASS'Y	
221	RXG0030	FRICTION GEAR	
222	XTW2+6S	SCREW	
223	RWJ4704050XX	MOTOR WIRE(4P), W971A	
224	REM0037	REEL MOTOR	
225	REM0036	CAPSTAN MOTOR	
226	RML0271	HOLDER HOOK	
227	RMB0268	SPRING, HOLDER HOOK	
228	RML0270	DRIVE LEVER	
229	RMQ0312	DRIVE RACK	
230	RMB0269	SPRING, DRIVE LEVER	
231	RMC0169	SHIELD PLATE	
232	RDG0209	INTERMEDIATE GEAR	
233	XTW26+12S	SCREW	
234	RFKRSTR979CK	SUB CHASSIS ASS'Y	
235	XTW26+6L	SCREW	
236	RHD26013	SCREW	
237	RMQ0314	SURASUTO SPACER	
238	RDG0206	LOADING GEAR	
239	RXF0040	FLYWHEEL(F)	
240	RXF0041	FLYWHEEL(R)	
241	RDV108ZA	BELT	
242	RSJ0003	SOLENOID	
243	RMS0398	MOVING IRON CORE	
244	RXL0089	IDLE GEAR	
245	RXG0029	REEL GEAR	
246	RMB0263	SPRING(F)	
247	RMB0264	SPRING(R)	
248	RDK0019	MAIN GEAR	
249	RUS609ZC	SPRING, TAPE PRESSURE	
250	RML0267	TRIGGER LEVER	
251	RUW147ZA	SPRING, TRIGGER LEVER	
252	RML0268	FOR. /REV. SIDE LEVER	
253	RMQ0368	HOLDER	
254	RVSSPI326-1	QUICK SENSOR	
255	REX0474	QUICK SENSOR WIRE(3P)	

Notes: *Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)	
IC1	AN7384	ELECTRIC VOLUME	
IC2	AN7352S-E2	PLAYBACK AMP	
IC3	AN7353S-E2	REC. EQ. AMP(DECK2)	
IC4	M5218L	HEADPHONES AMP	
IC5	AN7353S-E2	REC. EQ. AMP(DECK1)	
IC150	M62353FPE1	8ch D/A CONVERTER	
IC151	M62352FPE1	12ch D/A CONVERTER	
IC152	BU2040F-T2	SERIAL PARALLEL CONVERTER	
IC301	UPC1297CA	DOLBY HX PRO(DECK2)	
IC302	SVIBA4560FT1	E. CURRENT ADJ. CONT. (DECK2)	
IC351	UPC1297CA	DOLBY HX PRO(DECK1)	
IC352	SVIBA4560FT1	E. CURRENT ADJ. CONT. (DECK1)	
IC401	AN7354SC-E2	DOLBY B/C NR	
IC501	BA6218	REEL MOTOR DRIVE(DECK1)	
IC502	BA6218	REEL MOTOR DRIVE(DECK2)	
IC503	MC14052BFR2	ANALOG MULTIPLEXER	
IC504	MC14584BFR2	HEX SCHMITT TRIGGER	
IC505	M38172M4065F	MICROCOMPUTER	
IC506	LE93CS47M6TL	EEPROM	
IC971	RVSGP2S24BC	PHOTO INTERRUPTER(DECK1)	
IC971A	RVSGP2S24BC	PHOTO INTERRUPTER(DECK2)	
IC972	RVSGP2S24BC	PHOTO INTERRUPTER(DECK1)	
IC972A	RVSGP2S24BC	PHOTO INTERRUPTER(DECK2)	
		TRANSISTOR(S)	
Q1-4	2SJ164PQRTA	TRANSISTOR	
Q5	DTA114ESTP	TRANSISTOR	
Q6-8	2SC3311A-Q	TRANSISTOR	
Q9, 10	2SJ164PQRTA	TRANSISTOR	
Q150-153	DTA114ESTP	TRANSISTOR	
Q154, 155	DTC114ESTP	TRANSISTOR	
Q156	2SA1309A-R	TRANSISTOR	
Q158	DTC114ESTP	TRANSISTOR	
Q159	2SA1309A-R	TRANSISTOR	
Q301	2SA1309A-R	TRANSISTOR	
Q302, 303	2SC3311A-Q	TRANSISTOR	
Q304	2SB621A-R	TRANSISTOR	
Q305	2SD592ANCQ	TRANSISTOR	
Q306	2SB1030AQSTA	TRANSISTOR	
Q351	2SA1309A-R	TRANSISTOR	
Q352, 353	2SC3311A-Q	TRANSISTOR	
Q354	2SB621A-R	TRANSISTOR	
Q355	2SD592ANCQ	TRANSISTOR	

Ref. No.	Part No.	Part Name & Description	Remarks
Q356	2SB1030AQSTA	TRANSISTOR	
Q401-406	2SC3311A-Q	TRANSISTOR	
Q501	DTC114ESTP	TRANSISTOR	
Q502	2SB1030AQSTA	TRANSISTOR	
Q503	DTC114ESTP	TRANSISTOR	
Q504	2SB1030AQSTA	TRANSISTOR	
Q506	DTC114ESTP	TRANSISTOR	
Q507	2SB621A-R	TRANSISTOR	
Q508	2SC3311A-Q	TRANSISTOR	
Q509	2SD1862QRTV6	TRANSISTOR	
Q510	2SC3311A-Q	TRANSISTOR	
Q511	DTC114ESTP	TRANSISTOR	
Q512	2SB1030AQSTA	TRANSISTOR	
Q513	DTC114ESTP	TRANSISTOR	
Q514	2SB1030AQSTA	TRANSISTOR	
Q515	DTC114ESTP	TRANSISTOR	
Q516	2SB621A-R	TRANSISTOR	
Q517	2SC3311A-Q	TRANSISTOR	
Q518	2SD1862QRTV6	TRANSISTOR	
Q519, 520	2SC3311A-Q	TRANSISTOR	
Q521	DTA114ESTP	TRANSISTOR	
Q522	2SB621A-R	TRANSISTOR	
Q524	DTA114ESTP	TRANSISTOR	
Q525	2SB621A-R	TRANSISTOR	
Q526	2SA1309A-R	TRANSISTOR	
Q527, 528	2SD1423QRS	TRANSISTOR	
Q529, 530	2SA1309A-R	TRANSISTOR	
Q601, 602	2SC3327-A	TRANSISTOR	
Q603	DTC114ESTP	TRANSISTOR	
Q604	2SA1309A-R	TRANSISTOR	
Q605	2SC3311A-Q	TRANSISTOR	
Q606	2SD2037EFTA	TRANSISTOR	⚠
Q607	2SB1357EFTA	TRANSISTOR	⚠
Q608	2SD2037EFTA	TRANSISTOR	⚠
Q609	2SB621A-R	TRANSISTOR	⚠
Q610	2SD2037EFTA	TRANSISTOR	
Q611	2SB1357EFTA	TRANSISTOR	
Q612	2SB621A-R	TRANSISTOR	
Q613	2SD2037EFTA	TRANSISTOR	
Q614	2SB1357EFTA	TRANSISTOR	⚠
Q615	2SA1309A-R	TRANSISTOR	
Q701	2SC3311A-Q	TRANSISTOR	
		DIODE(S)	
D1-4	MA167	DIODE	
D5	MA165	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks
D6	MTZJ6R2BTA	DIODE	
D150, 151	MA165	DIODE	
D152	MTZJ5R1BTA	DIODE	
D153, 154	1SR35200TB	DIODE	
D157-159	MA165	DIODE	
D301, 302	MTZJ7R5CTA	DIODE	
D303-306	MA165	DIODE	
D351, 352	MTZJ7R5CTA	DIODE	
D353-356	MA165	DIODE	
D401, 402	MA165	DIODE	
D501, 502	MA165	DIODE	
D503	MA700	DIODE	
D505	MA165	DIODE	
D506	MTZJ3R3ATA	DIODE	
D508	MTZJ7R5CTA	DIODE	
D509, 510	MA165	DIODE	
D511	MA700	DIODE	
D512	MA165	DIODE	
D513	MTZJ3R3ATA	DIODE	
D514	1SR35200TB	DIODE	
D515	MTZJ7R5CTA	DIODE	
D516	1SR35200TB	DIODE	
D517	MA165	DIODE	
D601, 602	MA165	DIODE	⚠
D603-609	1SR35200TB	DIODE	⚠
D610, 611	MA165	DIODE	
D613, 614	MTZJ8R2CTA	DIODE	⚠
D615	MTZJ6R2BTA	DIODE	⚠
D616	MTZJ20DTA	DIODE	⚠
D617	MA165	DIODE	
D618	MTZJ8R2CTA	DIODE	⚠
D619, 620	1SR35200TB	DIODE	⚠
D971	RVD1SS133TA	DIODE (DECK1)	
D971A	RVD1SS133TA	DIODE (DECK2)	
		VARIABLE RESISTOR (S)	
VR1-3	EVNDXAA00B53	TAPE SPEED ADJ.	
VR701	EVJ02KF02B53	BIAS ADJ. CONTROL	
VR702	EVJ02FF02B15	REC LEVEL CONTROL	
VR703	EVJ02SF02G15	BALANCE CONTROL	
		OSC. (S) AND COMBINATION (S)	
Z501	RSXY6M00M01T	CRYSTAL OSCILLATOR (6MHz)	
Z971	EXBF6L306SYV	COMBINATION PART (DECK1)	
Z971A	EXBF6L306SYV	COMBINATION PART (DECK2)	
		COIL (S)	
L1	RLZ0003	COIL	
L2-4	SLQX303-1KT	COIL	

Ref. No.	Part No.	Part Name & Description	Remarks
L301, 302	SL09B1-Z	COIL	
L303	SL09B4-K	COIL	
L351, 352	SL09B1-Z	COIL	
L353	SL09B4-K	COIL	
L401, 402	QLM9Z10K	COIL	
L701	ELEXT101KA9	COIL	
		TRANSFORMER (S)	
T601	RTP1U4C001-V	POWER TRANSFORMER	(PP) ⚠
T601	RTP1U4E001-V	POWER TRANSFORMER	(EB, EG) ⚠
T601	RTP1U4E002-V	POWER TRANSFORMER	(GC) ⚠
		DISPLAY TUBE (S)	
FL501	RSL0139-F	FL DISPLAY TUBE	
		SWITCH (ES)	
S601	SSR187-1	VOLTAGE SELECTOR	(GC) ⚠
S701	EVQ21405R	SYNCHRO START	
S702	EVQ21405R	SPEED (X1, X2)	
S703	EVQ21405R	DOLBY NR (B, C)	
S704	EVQ21405R	REVERSE MODE	
S705	EVQ21405R	F. F. <TPS> (DECK1)	
S706	EVQ21405R	F. F. <TPS> (DECK2)	
S707	EVQ21405R	POWER	
S708	EVQ21405R	STOP (DECK2)	
S709	EVQ21405R	REW. <TPS> (DECK1)	
S710	EVQ21405R	REW. <TPS> (DECK2)	
S711	EVQ21405R	STOP (DECK1)	
S712	EVQ21405R	F. PLAYBACK (DECK2)	
S713	EVQ21405R	F. PLAYBACK (DECK1)	
S714	EVQ21405R	R. PLAYBACK (DECK2)	
S715	EVQ21405R	REC (DECK1)	
S716	EVQ21405R	REC (DECK2)	
S717	EVQ21405R	R. PLAYBACK (DECK1)	
S718	EVQ21405R	PAUSE (DECK1)	
S719	EVQ21405R	PAUSE (DECK2)	
S720	EVQ21405R	AUTO REC MUTE (DECK1)	
S721	EVQ21405R	AUTO REC MUTE (DECK2)	
S722	EVQ21405R	OPEN/CLOSE (DECK1)	
S723	EVQ21405R	OPEN/CLOSE (DECK2)	
S724	EVQ21405R	COUNTER2 MODE (DECK2)	
S725	EVQ21405R	COUNTER1 MODE (DECK1)	
S726	EVQ21405R	COUNTER2 RESET (DECK2)	
S727	EVQ21405R	COUNTER1 RESET (DECK1)	
S728	EVQ21405R	ATC (DECK1)	
S729	EVQ21405R	ATC (DECK2)	
S730	SSS180-1	TIMER	
S971	RSH1A018-U	MODE (DECK1)	
S971A	RSH1A018-U	MODE (DECK2)	

Ref. No.	Part No.	Part Name & Description	Remarks
S972	RSH1A019-U	HALF (DECK1)	
S972A	RSH1A019-U	HALF (DECK2)	
S973	RSH1A019-U	ATS (DECK1)	
S973A	RSH1A019-U	ATS (DECK2)	
S974	RSH1A019-U	R. REC INH. (DECK1)	
S974A	RSH1A019-U	R. REC INH. (DECK2)	
S975	RSH1A019-U	F. REC INH. (DECK1)	
S975A	RSH1A019-U	F. REC INH. (DECK2)	
S976	RSH1A019-U	ATS (DECK1)	
S976A	RSH1A019-U	ATS (DECK2)	
S977	RSH1A022-U	OPEN DETECTION (DECK1)	
S977A	RSH1A022-U	OPEN DETECTION (DECK2)	
S978	RSH1A022-U	CLOSE DETECTION (DECK1)	
S978A	RSH1A022-U	CLOSE DETECTION (DECK2)	
		CONNECTOR (S) AND SOCKET (S)	
CN2P	RJS1A6606	CONNECTOR (6P)	
CN3-6	RJU003K010M1	SOCKET (10P)	
CN501-503	RJU057W009	SOCKET (9P)	
CN504	RJU057W007	SOCKET (7P)	
CN601	RJS1A1101T1	CONNECTOR (1P)	
CN602	RJS1A1101T1	CONNECTOR (1P)	(EB, EG, GC)
CN603	RJS1A1101T1	CONNECTOR (1P)	
CN604, 605	RJS1A1101T1	CONNECTOR (1P)	(EB, EG, GC)
CN606-608	RJS1A1101T1	CONNECTOR (1P)	
CN609-611	RJS1A1101T1	CONNECTOR (1P)	(PP, GC)
CN701-703	RJU066H06	SOCKET (6P)	
CN704, 705	SJS50581BB	SOCKET (5P)	
CN706	RJU057W004	SOCKET (4P)	
CP1, 2	RJP5G18ZA	CONNECTOR (5P)	
CP3-6	RJT003K010-1	CONNECTOR (10P)	
CP501-503	RJT057W009-1	CONNECTOR (9P)	
CP504	RJT057W007-1	CONNECTOR (7P)	
CP505-508	RJT028W011-2	CONNECTOR (11P)	
CP701-703	RJT066H06	CONNECTOR (6P)	
CP704, 705	RJT067H05	CONNECTOR (5P)	
CP706	RJT057W004-1	CONNECTOR (4P)	
CP707	RJP3G17ZA	CONNECTOR (3P)	
CS971	RJU028W011-1	SOCKET (11P) (DECK1)	
CS971A	RJU028W011-1	SOCKET (11P) (DECK2)	
CS972	RJU028W011-1	SOCKET (11P) (DECK1)	
CS972A	RJU028W011-1	SOCKET (11P) (DECK2)	
CS974	RJP3G17ZA	CONNECTOR (3P) (DECK1)	
CS974A	RJP3G17ZA	CONNECTOR (3P) (DECK2)	
		JACK (S)	
JK1	SJF3069N	TERMINAL BOARD: REC/PLAY	
JK2	RJJ33T01	M3 JACK (BLACK) : S. EDIT	
JK3, 4	RJJ33TR01	M3 JACK (RED) : R. C.	
JK601	SJSD16	AC INLET	(PP) ⚠

Ref. No.	Part No.	Part Name & Description	Remarks
JK601	SJS9236	AC INLET	(EB, EG, GC) ⚠
JK602	SJS9331B	AC OUTLET	(PP) ⚠
JK710	SJJD19	HEADPHONES JACK	
		GND PART (S)	
E1	SNE1004-1	GND PLATE	
E701	RMC0199	GND PLATE	
		FLAT CABLE (S)	
W2P	REZ0573	FLAT CABLE (6P)	

■ RESISTORS AND CAPACITORS

Notes : * Capacity values are in microfarads (uF) unless specified otherwise, P = Pico-farads (pF) F = Farads (F)
* Resistance values are in ohms, unless specified otherwise, 1K = 1,000 (OHM), 1M = 1,000k (OHM)

Ref. No.	Part No.	Values & Remarks
		RESISTORS
R1, 2	ERDS2TJ225	1/4W 2.2M
R3, 4	ERDS2TJ104	1/4W 100K
R5, 6	ERDS2TJ225	1/4W 2.2M
R7, 8	ERDS2TJ104	1/4W 100K
R9, 10	ERDS2TJ225	1/4W 2.2M
R11-14	ERDS2TJ101	1/4W 100
R15, 16	ERDS2EJ121	1/4W 120
R17, 18	ERDS2TJ474	1/4W 470K
R19, 20	ERDS2TJ103	1/4W 10K
R21, 22	ERDS2TJ273	1/4W 27K
R23, 24	ERDS2TJ183T	1/4W 18K
R25, 26	ERDS2TJ103	1/4W 10K
R27, 28	ERDS2TJ101	1/4W 100
R29	ERDS2TJ332	1/4W 3.3K
R30	ERDS2TJ472	1/4W 4.7K
R31, 32	ERDS2TJ103	1/4W 10K
R33, 34	ERDS2TJ823T	1/4W 82K
R35	ERDS2TJ124T	1/4W 120K
R36	ERDS2TJ223	1/4W 22K
R37, 38	ERDS2TJ102	1/4W 1K
R39, 40	ERDS2TJ225	1/4W 2.2M
R41, 42	ERDS2TJ183T	1/4W 18K
R43, 44	ERDS2TJ393	1/4W 39K
R45, 46	ERDS2TJ394	1/4W 390K
R47, 48	ERDS2TJ561	1/4W 560
R49, 50	ERDS2TJ222	1/4W 2.2K
R51	ERDS2TJ393	1/4W 39K
R52	ERDS2TJ333	1/4W 33K
R53, 54	ERDS2TJ101	1/4W 100
R55	ERDS2TJ223	1/4W 22K
R56	ERDS2TJ332	1/4W 3.3K
R57, 58	ERDS2TJ103	1/4W 10K
R59	ERDS2TJ393	1/4W 39K
R60	ERDS2TJ333	1/4W 33K
R61, 62	ERDS2TJ562	1/4W 5.6K
R63, 64	ERDS2TJ222	1/4W 2.2K
R65, 66	ERDS2TJ473	1/4W 47K
R67, 68	ERDS2TJ103	1/4W 10K
R69, 70	ERDS2TJ682T	1/4W 6.8K
R71, 72	ERDS2TJ103	1/4W 10K
R73, 74	ERDS2TJ682T	1/4W 6.8K
R150	ERDS2TJ103	1/4W 10K
R151	ERDS2TJ184T	1/4W 180K
R152	ERDS2TJ103	1/4W 10K
R153	ERDS2TJ182	1/4W 1.8K
R155	ERDS2TJ184T	1/4W 180K
R156	ERDS2TJ272T	1/4W 2.7K
R157	ERDS2TJ103	1/4W 10K
R158	ERDS2TJ223	1/4W 22K
R161	ERDS2TJ100	1/4W 10
R162	ERDS2TJ332	1/4W 3.3K
R164	ERDS2TJ103	1/4W 10K
R165	ERDS2TJ332	1/4W 3.3K
R166, 167	ERDS2TJ102	1/4W 1K
R168	ERDS2TJ100	1/4W 10
R169	ERDS2TJ153	1/4W 15K
R170	ERDS2TJ221	1/4W 220
R171	ERDS2TJ332	1/4W 3.3K
R172	ERDS2TJ103	1/4W 10K
R173	ERDS2TJ221	1/4W 220
R174-178	ERDS2TJ103	1/4W 10K
R179, 180	ERDS2TJ184T	1/4W 180K
R301, 302	ERDS2TJ153	1/4W 15K
R303, 304	ERDS2TJ104	1/4W 100K
R305, 306	ERDS2TJ154	1/4W 150K
R307	ERDS2TJ101	1/4W 100
R308	ERDS2TJ1R0	1/4W 1
R309	ERDS2TJ101	1/4W 100
R310	ERDS1FJ270	1/2W 27 ⚠
R311	ERDS2TJ102	1/4W 1K
R312	ERDS2TJ682T	1/4W 6.8K
R313	ERDS2TJ392T	1/4W 3.9K
R314	ERDS2TJ471	1/4W 470
R315	ERDS2TJ681	1/4W 680
R316, 317	ERDS2TJ183T	1/4W 18K
R318	ERDS2TJ393	1/4W 39K
R319	ERDS2TJ153	1/4W 15K
R320	ERDS2TJ332	1/4W 3.3K
R321	ERDS2TJ102	1/4W 1K
R322, 323	ERDS2TJ100	1/4W 10
R324	ERDS2TJ122	1/4W 1.2K
R325-327	ERDS1FJ270	1/2W 27 ⚠
R328	ERDS2TJ222	1/4W 2.2K
R329	ERDS2TJ473	1/4W 47K
R330, 331	ERDS1FJ270	1/2W 27 ⚠
R332	ERDS2TJ102	1/4W 1K
R351, 352	ERDS2TJ153	1/4W 15K
R353, 354	ERDS2TJ104	1/4W 100K
R355, 356	ERDS2TJ154	1/4W 150K
R357	ERDS2TJ101	1/4W 100
R358	ERDS2TJ1R0	1/4W 1
R359	ERDS2TJ101	1/4W 100
R360	ERDS1FJ270	1/2W 27 ⚠
R361	ERDS2TJ102	1/4W 1K
R362	ERDS2TJ682T	1/4W 6.8K
R363	ERDS2TJ392T	1/4W 3.9K
R364	ERDS2TJ471	1/4W 470
R365	ERDS2TJ681	1/4W 680
R366, 367	ERDS2TJ183T	1/4W 18K
R368	ERDS2TJ393	1/4W 39K
R369	ERDS2TJ153	1/4W 15K
R370	ERDS2TJ332	1/4W 3.3K
R371	ERDS2TJ102	1/4W 1K
R372, 373	ERDS2TJ100	1/4W 10
R374	ERDS2TJ122	1/4W 1.2K
R375	ERDS1FJ270	1/2W 27 ⚠
R377	ERDS1FJ270	1/2W 27 ⚠
R378	ERDS2TJ222	1/4W 2.2K
R379	ERDS2TJ473	1/4W 47K
R380-382	ERDS1FJ270	1/2W 27 ⚠
R383	ERDS2TJ102	1/4W 1K
R401-404	ERDS2TJ684	1/4W 680K
R405, 406	ERDS2TJ242	1/4W 2.4K
R407, 408	ERDS2TJ562	1/4W 5.6K
R409, 410	ERDS2TJ223	1/4W 22K
R413, 414	ERDS2TJ104	1/4W 100K
R501	ERDS2TJ102	1/4W 1K
R503	ERDS2TJ682T	1/4W 6.8K
R504	ERDS2TJ472	1/4W 4.7K
R505	ERDS2TJ123	1/4W 12K
R507	ERDS2TJ223	1/4W 22K
R508	ERDS2TJ821	1/4W 820
R509	ERDS2TJ472	1/4W 4.7K
R510	ERDS2TJ682T	1/4W 6.8K
R516	ERDS2TJ223	1/4W 22K
R517	ERDS2TJ821	1/4W 820
R520	ERDS2TJ472	1/4W 4.7K
R522	ERDS2TJ223	1/4W 22K
R523	ERDS2TJ821	1/4W 820
R524	ERDS1FJ270	1/2W 27 ⚠
R525	ERDS2TJ332	1/4W 3.3K
R526	ERDS2TJ101	1/4W 100
R527	ERDS2TJ332	1/4W 3.3K
R528	ERDS2TJ222	1/4W 2.2K
R529, 530	ERDS2TJ103	1/4W 10K
R531	ERDS2TJ271	1/4W 270
R532	ERDS2TJ102	1/4W 1K
R534	ERDS2TJ682T	1/4W 6.8K
R535	ERDS2TJ472	1/4W 4.7K
R536	ERDS2TJ123	1/4W 12K
R538	ERDS2TJ223	1/4W 22K
R539	ERDS2TJ821	1/4W 820
R540	ERDS2TJ472	1/4W 4.7K
R541	ERDS2TJ682T	1/4W 6.8K

Ref. No.	Part No.	Values & Remarks
R547	ERDS2TJ223	1/4W 22K
R548	ERDS2TJ821	1/4W 820
R549	ERDS2TJ472	1/4W 4.7K
R550	ERDS2TJ223	1/4W 22K
R551	ERDS2TJ821	1/4W 820
R552	ERDS1FJ270	1/2W 27 ⚠
R553	ERDS2TJ332	1/4W 3.3K
R554	ERDS2TJ101	1/4W 100
R555	ERDS2TJ332	1/4W 3.3K
R556	ERDS2TJ222	1/4W 2.2K
R557, 558	ERDS2TJ103	1/4W 10K
R559	ERDS2TJ271	1/4W 270
R560-563	ERDS2TJ103	1/4W 10K
R564	ERDS2TJ331	1/4W 330
R565	ERDS2TJ183T	1/4W 18K
R567	ERDS2TJ471	1/4W 470
R568	ERDS2TJ331	1/4W 330
R569	ERDS2TJ103	1/4W 10K
R570	ERDS2TJ472	1/4W 4.7K
R571	ERDS2TJ102	1/4W 1K
R572	ERDS2TJ472	1/4W 4.7K
R573	ERDS2TJ102	1/4W 1K
R574, 575	ERDS2TJ472	1/4W 4.7K
R576	ERDS2TJ333	1/4W 33K
R579, 580	ERDS2TJ472	1/4W 4.7K
R581	ERDS2TJ183T	1/4W 18K
R582	ERDS2TJ333	1/4W 33K
R583	ERDS2TJ103	1/4W 10K
R586-588	ERDS2TJ223	1/4W 22K
R589	ERDS2TJ472	1/4W 4.7K
R592, 593	ERDS2TJ103	1/4W 10K
R594	ERDS2TJ223	1/4W 22K
R595	ERDS2TJ562	1/4W 5.6K
R596	ERDS2TJ272T	1/4W 2.7K
R597, 598	ERDS2TJ102	1/4W 1K
R601-605	ERDS2TJ472	1/4W 4.7K
R606	ERDS2TJ103	1/4W 10K
R607	ERDS2TJ472	1/4W 4.7K
R610	ERDS2TJ103	1/4W 10K
R611, 612	ERD2FCVJ6R8T	1/4W 6.8 ⚠
R613, 614	ERDS2TJ102	1/4W 1K
R616, 617	ERDS2TJ101	1/4W 100
R618, 619	ERD2FCVG100T	1/4W 10 ⚠
R620, 621	ERDS2TJ222	1/4W 2.2K
R622, 623	ERDS2TJ101	1/4W 100
R624	ERD2FCVJ6R8T	1/4W 6.8 ⚠
R627	ERD2FCVJ6R8T	1/4W 6.8 ⚠
R628, 629	ERD2FCVG270T	1/4W 27 ⚠
R630	ERDS2TJ472	1/4W 4.7K
R634	ERG1SJ220E	1W 22
R635	ERDS2TJ101	1/4W 100
R636	ERDS2TJ222	1/4W 2.2K

Ref. No.	Part No.	Values & Remarks
R637, 638	ERDS2TJ101	1/4W 100
R639	ERDS2TJ103	1/4W 10K
R640	ERDS2TJ472	1/4W 4.7K
R641	ERDS2TJ103	1/4W 10K
R643	ERDS2TJ331	1/4W 330
R644	ERDS2TJ1R0	1/4W 1
R701	ERDS2TJ821	1/4W 820
R702	ERDS2TJ102	1/4W 1K
R703	ERDS2TJ153	1/4W 15K
R704	ERDS2TJ122	1/4W 1.2K
R705	ERDS2TJ102	1/4W 1K
R706	ERDS2TJ152	1/4W 1.5K
R707	ERDS2TJ182	1/4W 1.8K
R708	ERDS2TJ102	1/4W 1K
R709	ERDS2TJ821	1/4W 820
R710, 711	ERDS2TJ562	1/4W 5.6K
R712, 713	ERDS2TJ102	1/4W 1K
R714	ERDS2TJ821	1/4W 820
R715	ERDS2TJ122	1/4W 1.2K
R716	ERDS2TJ152	1/4W 1.5K
R717, 718	ERDS2TJ182	1/4W 1.8K
R719	ERDS2TJ152	1/4W 1.5K
R721, 722	ERDS2TJ222	1/4W 2.2K
R723	ERDS2TJ122	1/4W 1.2K
R724, 725	ERDS2TJ332	1/4W 3.3K
R726	ERDS2TJ222	1/4W 2.2K
R727, 728	ERDS2TJ472	1/4W 4.7K
R729, 730	ERDS2TJ682T	1/4W 6.8K
R731, 732	ERDS2TJ123	1/4W 12K
R733, 734	ERDS2TJ223	1/4W 22K
R735	ERDS2TJ683	1/4W 68K
R751	ERQ16NKWR15E	1/6W 0.15 (EB, EG, GC) ⚠
R796-799	ERDS2TJ393	1/4W 39K
R971	ERDS2TJ151	1/4W 150 (DECK1)
R971A	ERDS2TJ151	1/4W 150 (DECK2)
		CHIP JUMPERS
J1-5	W5E-18H	CHIP JUMPER (DECK1)
J1A-5A	W5E-18H	CHIP JUMPER (DECK2)
		CAPACITORS
C1, 2	ECBT1H102KB5	50V 1000P
C3, 4	ECBT1H471KB5	50V 470P
C5, 6	ECBT1H102KB5	50V 1000P
C7, 8	ECBT1H471KB5	50V 470P
C9, 10	ECEA1HKA0R1B	50V 0.1U
C11, 12	ECBT1E103ZF	25V 0.01U
C13, 14	ECQB1H682JF3	50V 6800P
C15, 16	ECEA1AU101	10V 100U

Ref. No.	Part No.	Values & Remarks
C17	ECEA1HKAR47B	50V 0.47U
C18	ECEA1CKA100B	16V 10U
C19, 20	ECKR2H121KB5	500V 120P
C21, 22	ECEA1CKA100B	16V 10U
C23, 24	ECEA1HKA2R2B	50V 2.2U
C25, 26	ECEA1HKAR47B	50V 0.47U
C27, 28	ECEA1CKN100B	16V 10U
C29-32	ECEA1CKA100B	16V 10U
C33, 34	ECEA1CKA220B	16V 22U
C35	ECQB1H392JF3	50V 3900P
C37, 38	ECEA1CKA220B	16V 22U
C39, 40	ECBT1E103ZF	25V 0.01U
C41, 42	ECEA1HKA010B	50V 1U
C43, 44	ECEA1CKA100B	16V 10U
C45, 46	ECBT1E103ZF	25V 0.01U
C47, 48	ECEA1HKA2R2B	50V 2.2U
C49, 50	ECEA1HKAR47B	50V 0.47U
C51, 52	ECEA1CKN100B	16V 10U
C53-56	ECEA1CKA100B	16V 10U
C57, 58	ECBT1H561KB5	50V 560P
C59, 60	ECKR2H121KB5	500V 120P
C61, 62	ECBT1H561KB5	50V 560P
C63	ECEA1HKA010B	50V 1U
C64	ECEA1CKA100B	16V 10U
C65, 66	ECBT1E103ZF	25V 0.01U
C67-70	ECBT1C472KR5	16V 4700P
C150	ECBT1E103ZF	25V 0.01U
C151	ECEA1AU471	10V 470U
C152	ECBT1E103ZF	25V 0.01U
C153	ECA0JM222B	6.3V 2200U
C154	ECBT1H331KB5	50V 330P
C155	ECBT1H102KB5	50V 1000P
C301	ECBT1E103ZF	25V 0.01U
C302	ECEA1CKA100B	16V 10U
C303, 304	ECBT1C122KR5	16V 1200P
C305, 306	ECQB1H103JF3	50V 0.01U
C307, 308	ECQB1H223JF3	50V 0.022U
C309, 310	ECQV1H473JM3	50V 0.047U
C311, 312	ECBT1H121KB5	50V 120P
C313, 314	ECKR2H821KB5	500V 820P
C315, 316	ECBT1E223ZF	25V 0.022U
C317	ECBT1H220J5	50V 22P
C318	ECQP1153JZ	100V 0.015U
C320	ECBT1H220J5	50V 22P
C322	ECEA1AU221	10V 220U
C323	ECBT1E103ZF	25V 0.01U
C324	ECEA1EKA4R7B	25V 4.7U
C325	ECKR1H392KB5	50V 3900P
C326	ECEA1HKA0R1B	50V 0.1U
C327	ECKW1H222KB5	50V 2200P
C328	ECKD1H682KB	50V 6800P
C329	ECKW1H222KB5	50V 2200P

Ref. No.	Part No.	Values & Remarks
C330	ECBT1E103ZF	25V 0.01U
C332	ECBT1E103ZF	25V 0.01U
C351	ECBT1E103ZF	25V 0.01U
C352	ECEA1CKA100B	16V 10U
C353, 354	ECBT1C122KR5	16V 1200P
C355, 356	ECQB1H103JF3	50V 0.01U
C357, 358	ECQB1H223JF3	50V 0.022U
C359, 360	ECQV1H473JM3	50V 0.047U
C361, 362	ECBT1H121KB5	50V 120P
C363, 364	ECKR2H821KB5	500V 820P
C365, 366	ECBT1E223ZF	25V 0.022U
C367	ECBT1H220J5	50V 22P
C368	ECQP1153JZ	100V 0.015U
C370	ECBT1H220J5	50V 22P
C372	ECEA1AU221	10V 220U
C373	ECBT1E103ZF	25V 0.01U
C374	ECEA1EKA4R7B	25V 4.7U
C375	ECKR1H392KB5	50V 3900P
C376	ECEA1HKA0R1B	50V 0.1U
C377	ECKW1H222KB5	50V 2200P
C378	ECKD1H682KB	50V 6800P
C379	ECKW1H222KB5	50V 2200P
C380	ECBT1E103ZF	25V 0.01U
C382	ECBT1E103ZF	25V 0.01U
C401, 402	ECBT1C122KR5	16V 1200P
C403, 404	ECBT1C152KR5	16V 1500P
C405, 406	ECQB1H222JF3	50V 2200P
C407, 408	ECQV1H124JM3	50V 0.12U
C409, 410	ECEA1HKA010B	50V 1U
C411, 412	ECEA1HKA2R2B	50V 2.2U
C413, 414	ECEA1HKA010B	50V 1U
C415, 416	ECQB1H152JF3	50V 1500P
C417, 418	ECEA1HKAR47B	50V 0.47U
C419, 420	ECQB1H152JF3	50V 1500P
C421, 422	ECEA1HKAR47B	50V 0.47U
C502	ECEA1HKAR47B	50V 0.47U
C504	ECBT1E103ZF	25V 0.01U
C505	ECEA1CN100SB	16V 10U
C507	ECEA1HKAR47B	50V 0.47U
C508	ECBT1E103ZF	25V 0.01U
C509	ECEA1CN100SB	16V 10U
C510	ECEA1CKA100B	16V 10U
C512	ECEA1CKA100B	16V 10U
C513	ECEA1EKA4R7B	25V 4.7U
C514	ECEA1CKA100B	16V 10U
C515	ECEA1HKA010B	50V 1U
C516, 517	ECEA1CKA100B	16V 10U
C518	ECBT1E103ZF	25V 0.01U
C519	ECEA1AKA220B	10V 22U
C521	ECBT1E103ZF	25V 0.01U
C522	ECEA1AKA220B	10V 22U
C601	ECKR2H682PE	500V 6800P

Ref. No.	Part No.	Values & Remarks
C602	ECEA1EU222B	25V 2200U ⚠
C603	ECA1HM221B	50V 220U ⚠
C604	ECKR2H682PE	500V 1000U
C605, 606	ECA1EM102B	25V 1000U ⚠
C607, 608	ECBT1E103ZF	25V 0.01U
C609, 610	ECEA1AU221	10V 220U
C611-614	ECBT1E103ZF	25V 0.01U
C615, 616	ECA1AM102B	10V 1000U
C617, 618	ECBT1E103ZF	25V 0.01U
C619	ECA1EM221B	25V 220U
C620	ECA1CM222B	16V 2200U ⚠
C701-705	ECBT1E103ZF	25V 0.01U

Printed in Japan
H930110700 SN/H H/TN